

# NASA

National Aeronautics and  
Space Administration  
Langley Research Center  
Hampton, Virginia 23681-2199

## SOLICITATION

---

### **REQUIREMENT:** **X-43C Hypersonic Demonstrator Vehicles**

---

1. A Pre-Proposal Conference is planned for March 6, 2003 (see Section L, 7). Questions/comments are requested in response to the solicitation no later than 4:00 p.m. March 3, 2003 in order that as many questions as possible may be answered at the conference. Questions/comments should be forwarded to NASA, Langley Research Center, Industry Assistance Office, Mail Stop 144, Hampton, VA 23681-2199 or by e-mail transmission to [r.b.gardner@larc.nasa.gov](mailto:r.b.gardner@larc.nasa.gov) or by facsimile to (757) 864-7898.
2. Section L, contains important information on proposal preparation. Section M sets forth the evaluation methods for award.
3. The Government intends to award the contract resulting from this solicitation without discussions. See Section L provision entitled INSTRUCTIONS TO OFFERORS—COMPETITIVE ACQUISITION (FAR 52.215-1) (MAY 2001). To facilitate this process, we would like to avoid situations where proposals include substantive exceptions to the proposed contract terms and conditions which might be unacceptable to the Government and, therefore, preclude award. Therefore, it is requested and strongly recommended that you bring to the Government's attention during the DRAFT RFP review period any exceptions, questions, or additions you have to the proposed contract terms and conditions. The resolution of any exceptions to terms and conditions prior to receipt of proposals will aid the Government in its intention to award without discussions and thus streamline the procurement process.
4. This solicitation is being distributed electronically in an attempt to streamline the procurement process.
5. NAICS Code: **541710** is applicable to this procurement.
6. Section L, 9., Proposal Page Limitations (NASA 1852.215-81) (FEB 1998) includes a **75** page limitation for the Technical Volume. This limitation includes all tables, figures and graphics. **PAGES SUBMITTED IN EXCESS OF THE LIMITATIONS SPECIFIED IN THIS PROVISION WILL NOT BE EVALUATED BY THE GOVERNMENT AND WILL BE RETURNED TO THE OFFEROR.**

<b>SOLICITATION, OFFER AND AWARD</b>		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350) ➤		RATING DO-C9	PAGE 1 OF
2. CONTRACT NO.	3. SOLICITATION NO. <b>1-50-OCB.1148</b>	4. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)	5. DATE ISSUED <b>February 21, 2003</b>	6. REQUISITION/PURCHASE NO. <b>OCB.1148</b>	
7. ISSUED BY <b>National Aeronautics and Space Administration Langley Research Center Hampton, VA 23681-2199</b>		CODE	8. ADDRESS OFFER TO (If other than Item 7) <b>NASA, Langley Research Center 9A Langley Blvd., Building 1195A, Room 105 Hampton, VA 23681-2199</b>		

**NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder"**

#### SOLICITATION

9. Sealed offers in original and **ten (10)** copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in **9A Langley Blvd., Building 1195B, Rm. 125** until **4:30 p.m.** local time, on **April 7, 2003** (date). CAUTION - LATE Submissions, Modifications, and Withdrawals: See Section L., Provision No. 52.214-7 or 52.215-1. All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL: ➤	A. NAME <b>Brad Gardner</b>	B. TELEPHONE NO. (NO COLLECT CALLS)			C. EMAIL ADDRESS <b>r.b.gardner@larc.nasa.gov</b>
		AREA CODE <b>(757)</b>	NUMBER <b>864-2525</b>	EXT. <b>N/A</b>	

#### 11. TABLE OF CONTENTS

(X)	SEC.	DESCRIPTION	PAGE(S)	(X)	SEC.	DESCRIPTION	PAGE(S)
PART I - THE SCHEDULE				PART II - CONTRACT CLAUSES			
<input checked="" type="checkbox"/>	A	SOLICITATION/CONTRACT FORM	2	<input checked="" type="checkbox"/>	I	CONTRACT CLAUSES	15-19
<input checked="" type="checkbox"/>	B	SUPPLIES OR SERVICES AND PRICES/COSTS	3	PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH.			
<input checked="" type="checkbox"/>	C	DESCRIPTION/SPECS./WORK STATEMENT	3	<input checked="" type="checkbox"/>	J	LIST OF ATTACHMENTS	20
<input checked="" type="checkbox"/>	D	PACKAGING AND MARKING	3-4	PART IV - REPRESENTATIONS AND INSTRUCTIONS			
<input checked="" type="checkbox"/>	E	INSPECTION AND ACCEPTANCE	4	<input checked="" type="checkbox"/>	K	REPRESENTATIONS, CERTIFICATIONS AND	21-31
<input checked="" type="checkbox"/>	F	DELIVERIES OR PERFORMANCE	4-6	OTHER STATEMENTS OF OFFERORS			
<input checked="" type="checkbox"/>	G	CONTRACT ADMINISTRATION DATA	6-10	<input checked="" type="checkbox"/>	L	INSTRS., CONDS., AND NOTICES TO OFFERORS	31-41
<input checked="" type="checkbox"/>	H	SPECIAL CONTRACT REQUIREMENTS	10-15	<input checked="" type="checkbox"/>	M	EVALUATION FACTORS FOR AWARD	41-45

#### OFFER (Must be fully completed by offeror)

NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within **120** calendar days (60 calendar days unless a different period is inserted by the offeror) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

13. DISCOUNT FOR PROMPT PAYMENT ➤ (See Section I, clause No. 52-232-8)	10 CALENDAR DAYS %	20 CALENDAR DAYS %	30 CALENDAR DAYS %	CALENDAR DAYS %
---	-----------------------	-----------------------	-----------------------	--------------------

14. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION). For offerors and related documents numbered and dated:	AMENDMENT NO	DATE	AMENDMENT NO	DATE

15. NAME AND ADDRESS OF OFFEROR	CODE	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)
---------------------------------	------	----------	---

15B. TELEPHONE NO. (Include area code)	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER <input type="checkbox"/> SUCH ADDRESS IN SCHEDULE	17. SIGNATURE	18. OFFER DATE
---	---	---------------	----------------

#### AWARD (To be completed by Government)

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT	21. ACCOUNTING AND APPROPRIATION
-----------------------------------	------------	----------------------------------

22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION <input type="checkbox"/> 10 U.S.C. 2304(c) ( ) <input type="checkbox"/> 41 U.S.C. 253(c) ( )	23. SUBMIT INVOICES TO ADDRESS SHOWN IN: ➤ (4 copies unless otherwise specified)	ITEM
--	---	------

24. ADMINISTERED BY (If other than Item 7)	CODE	25. PAYMENT WILL BE MADE BY	CODE
--	------	-----------------------------	------

26. NAME OF CONTRACTING OFFICER (Type or print) <b>Brad Gardner</b>	27. UNITED STATES OF AMERICA (Signature of Contracting Officer)	28. AWARD DATE
--	--	----------------

**IMPORTANT - Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice.**

## PART I - THE SCHEDULE

### SECTION B - SUPPLIES OR SERVICES AND PRICE/COSTS

#### 1. ESTIMATED COST AND INCENTIVE FEE (NFS 1852.216-84) (OCTOBER 1996)

The target cost of this contract is \$ \_\_\_\_\_. The target fee of this contract is \$ \_\_\_\_\_. The total target cost and target fee of this contract is \$ \_\_\_\_\_.

The maximum fee is \$ \_\_\_\_\_.

The minimum fee is \$ \_\_\_\_\_.

The cost sharing for cost underruns is:

Government \_\_\_\_\_ % Contractor \_\_\_\_\_ %.

The cost sharing for cost overruns is:

Government \_\_\_\_\_ % Contractor \_\_\_\_\_ %.

#### 2. CONTRACT FUNDING (NFS 18-52.232-81) (JUN 1990)

(a) For purposes of payment of cost, exclusive of fee, in accordance with the Limitation of Funds clause, the total amount allotted by the Government to this contract is \$ \_\_\_\_\_. This allotment covers the following estimated period of performance: Contract Award through \_\_\_\_\_.

(b) An additional amount of \$ \_\_\_\_\_ is obligated under this contract for payment of fee.

#### 3. SUPPLIES AND/OR SERVICES TO BE FURNISHED (LaRC 52.211-90) (MAY 1999)

The Contractor shall provide all resources (except as may be expressly stated in this contract as furnished by the Government) necessary to perform the requirements delineated in the Description/Specifications/Statement of Work in Exhibit A.

### SECTION C - DESCRIPTION/SPECIFICATION/WORK STATEMENT

#### 1. STATEMENT OF WORK

The Contractor shall perform the effort specified in the Exhibit A, Statement of Work, X-43C Hypersonic Demonstrator Vehicles.

### SECTION D - PACKAGING AND MARKING

#### 1. LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

##### I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
------------------	------	-------

None included by reference.

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
1852.211-70	JUN 2000	PACKAGING, HANDLING, AND TRANSPORTATION

**SECTION E - INSPECTION AND ACCEPTANCE**

1. LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.246-8	MAY 2001	INSPECTION OF RESEARCH AND DEVELOPMENT--COST-REIMBURSEMENT

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
None included by reference.		

2. MATERIAL INSPECTION AND RECEIVING REPORT (NFS 1852.246-72) (JUN 1995)

(a) At the time of each delivery to the Government under this contract, the Contractor shall furnish a Material Inspection and Receiving Report (DD Form 250 series) prepared in 5 copies, an original and 4 copies.

(b) The Contractor shall prepare the DD Form 250 in accordance with NASA FAR Supplement 1846.672-1. The Contractor shall enclose the copies of the DD Form 250 in the package or seal them in a waterproof envelope, which shall be securely attached to the exterior of the package in the most protected location.

(c) When more than one package is involved in a shipment, the Contractor shall list on the DD Form 250, as additional information, the quantity of packages and the package numbers. The Contractor shall forward the DD Form 250 with the lowest numbered package of the shipment and print the words "CONTAINS DD FORM 250" on the package.

**SECTION F - DELIVERIES OR PERFORMANCE**

1. LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.211-15	SEP 1990	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS
52.242-15	AUG 1989	STOP-WORK ORDER (ALTERNATE I) (APR 1984)
52.247-34	NOV 1991	F.O.B. DESTINATION

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
------------------	------	-------

None included by reference.

2. TIME OF DELIVERY (FAR 52.211-8)(JUN 1997)

The Government requires delivery to be made according to the following schedule:

Item No.	Description	Quantity	Delivery from Effective Date of Contact
1	Demonstrator Vehicle (DV) Emulator Core Components	1 lot	13 months
2	DV Emulator	1 lot	27 months
3	Flight Clearance Engine (FCE)	1 each	22 months
4	FCE Support pedestal for 8-ft HTT	1 each	22 months
5	Ground support equipment for FCE	1 lot	22 months
6	First DV including spares	1 lot	39 months
7	Ground Support Equipment (GSE) for DV and Adapter	1 lot	39 months
8	First DV assembly fixture/transportation cart	1 each	39 months
9	First Adapter	1 each	39 months
10	First Adapter assembly fixture/transportation cart	1 each	39 months
11	Second DV	1 each	48 months
12	Second DV assembly fixture/transportation cart	1 each	48 months
13	Second Adapter	1 each	48 months
14	Second Adapter assembly fixture/transportation cart	1 each	48 months
15	Third DV	1 each	57 months
16	Third Adapter	1 each	57 months

3. DELIVERY REQUIREMENTS (LaRC 52.211-96) (APR 2002)

Delivery shall be f.o.b. destination (items 1, 2, and 6 through 16):

National Aeronautics and Space Administration  
Dryden Flight Research Center  
Warehouse #7  
Edwards, CA 93523

Delivery shall be f.o.b. destination (items 3, 4, and 5):

National Aeronautics and Space Administration  
Langley Research center  
4 South Marvin Street (Bldg. 1206)  
Hampton, VA 23681-2199

4. PLACE(S) OF PERFORMANCE (LaRC 52.211-98) (OCT 1992)

The place(s) of performance shall be:

The Contractor's facility located in TBD.

NASA Dryden Flight Research Center, Edwards, CA, and NASA Langley Research Center, Hampton, VA

5. PERIOD OF PERFORMANCE (LaRC 52.211-91)(NOV 2002)

The period of performance of this contract shall be sixty-six (66) months from the effective date of the contract.

**SECTION G - CONTRACT ADMINISTRATION DATA**

1. LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
------------------	------	-------

None included by reference.

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
1852.227-70	MAY 2002	NEW TECHNOLOGY
1852.242-73	JUL 2000	NASA CONTRACTOR FINANCIAL MANAGEMENT REPORTING

2. PERFORMANCE INCENTIVE (NASA 1852.216-88) (JAN 1997)

(a) The performance incentives apply to the three X-43C hypersonic demonstrator vehicles and adapters.

(b) **Standard performance level.** At the standard performance level, the Contractor has met the contract requirement for the unit of measurement. Neither positive nor negative incentives apply when this level is achieved. The standard performance level for the X-43C hypersonic demonstrator vehicles and adapters is defined in Exhibit D.

(c) **Positive incentive.** The Contractor earns a separate positive incentive amount for each hardware item listed in paragraph (a) of this clause when the standard performance level for that item is exceeded. The amount earned for each item varies as set forth in Exhibit D. The units of measurement and the incentive amounts associated with each vehicle/adaptor is set forth in Exhibit D.

(d) **Negative incentive.** The Contractor will pay to the Government a negative incentive amount for each hardware item that fails to achieve the standard performance level. The amount to be paid for each vehicle is set forth in Exhibit D.

(e) The final calculation of positive or negative performance incentive amounts shall be done at the conclusion of the third flight.

(1) When the Contracting Officer determines that the performance level achieved fell below the standard performance level, the Contractor will either pay the amount due the Government or credit the next payment voucher for the amount due, as directed by the Contracting Officer.

(2) When the performance level exceeds the standard level, the Contractor may request payment of the incentive amount associated with a given level of performance, provided that such payments shall not be more frequent than monthly. When performance ceases or the maximum positive incentive is reached, the Government shall calculate the final performance incentive earned and unpaid and promptly remit it to the Contractor.

(f) If performance cannot be demonstrated, through no fault of the Contractor, the Contractor will be paid 100% of the maximum available technical performance incentive for each vehicle, subject to the Limitation of Funds clause.

(g) The decisions made as to the amount(s) of positive or negative incentives are subject to the Disputes clause.

### 3. SUBMISSION OF VOUCHERS FOR PAYMENT (NFS 1852.216-87) (MAR 1998)

(a) The designated billing office for cost vouchers for purposes of the Prompt Payment clause of this contract is indicated below. Public vouchers for payment of costs shall include a reference to the number of this contract.

(b)(1) If the Contractor is authorized to submit interim cost vouchers directly to the NASA paying office, they shall be prepared in accordance with paragraph (c) of this clause and submitted to:

NASA Langley Research Center  
Attn: Financial Management Division, M/S 175  
Hampton, VA 23681-2199

(2) For any period that the Defense Contract Audit Agency has authorized the Contractor to submit interim vouchers directly to the Government paying office, interim vouchers are not required to be sent to the Auditor and are considered to be provisionally approved for payment, subject to final audit.

(3) Copies of vouchers should be submitted as follows:

- (i) Copy 1 - NASA Contracting Officer
- (ii) Copy 2 - DCAA Auditor
- (iii) Copy 3 - Contractor
- (iv) Copy 4 - Contract Administration Office, if delegated

(c) If the Contractor is not authorized to submit interim cost vouchers directly to the paying office as described in paragraph (b), the Contractor shall prepare and submit vouchers as follows:

(1) One original Standard Form (SF) 1034, SF 1035, or equivalent Contractor's attachment to the cognizant DCAA office.

(2) Four copies of SF 1034A, SF 1035A, or equivalent Contractor's attachment to the following offices by insertion in the memorandum block of their names and addressees:

- (i) Copy 1 - NASA Contracting Officer
- (ii) Copy 2 - DCAA Auditor
- (iii) Copy 3 - Contractor
- (iv) Copy 4 - Contract Administration Office, if delegated

(3) The Contracting Officer may designate other recipients as required.

(d) Public vouchers for payment of fee shall be prepared similarly to the procedure in paragraph (c) of this clause, and be forwarded to:

NASA Langley Research Center  
Attn: Financial Management Division, M/S 175  
Hampton, VA 23681-2199

This is the designated billing office for fee vouchers for purposes of the Prompt Payment clause of this contract.

(e) In the event that amounts are withheld from payment in accordance with provisions of this contract, a separate voucher for the amount withheld will be required before payment for that amount may be made.

(f) Payments of cost shall be made in monthly installments. Incentive fee payments will be made in accordance with the Incentive Fee Plan (Exhibit D).

4. DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT REPRESENTATIVE (NASA 1852.227-72) (JUL 1997)

(a) For purposes of administration of the clause of this contract entitled "New Technology" or "Patent Rights -- Retention by the Contractor (Short Form)", whichever is included, the following named representatives are hereby designated by the Contracting Officer to administer such clause:

New Technology Representative  
Office Code 212  
NASA Langley Research Center  
Hampton, VA 23681-2199

Patent Representative  
Office Code 212  
NASA Langley Research Center  
Hampton, VA 23681-2199

(b) Reports of reportable items and disclosure of subject inventions, interim reports, final reports, utilization reports, and other reports required by the clause, as well as any correspondence with respect to such matters, should be directed to the New Technology Representative unless transmitted in response to correspondence or request from the Patent Representative. Inquiries or requests regarding disposition of rights, election of rights, or related matters should be directed to the Patent Representative. This clause shall be included in any subcontract hereunder requiring a "New Technology" clause or "Patent Rights--Retention by the Contractor (Short Form)" clause, unless otherwise authorized or directed by the Contracting Officer. The respective responsibilities and authorities of the above-named representatives are set forth in 1827.305-370 of the NASA FAR Supplement.

5. TECHNICAL DIRECTION (NFS 18-52.242-70) (SEP 1993)

(a) Performance of the work under this contract is subject to the written technical direction of the Contracting Officer Technical Representative (COTR), who shall be specifically appointed by the Contracting Officer in writing in accordance with NASA FAR Supplement 18-42.270. "Technical direction" means a directive to the Contractor that approves approaches, solutions, designs, or refinements; fills in details or otherwise completes the general description of work or documentation items; shifts emphasis among work areas or tasks; or furnishes similar instruction to the Contractor. Technical direction includes requiring studies and pursuit of certain lines of inquiry regarding matters within the general tasks and requirements in Section C of this contract.

(b) The COTR does not have the authority to, and shall not, issue any instruction purporting to be technical direction that--



- (1) Constitutes an assignment of additional work outside the statement of work;
  - (2) Constitutes a change as defined in the changes clause;
  - (3) Constitutes a basis for any increase or decrease in the total estimated contract cost, the fixed fee (if any), or the time required for contract performance;
  - (4) Changes any of the expressed terms, conditions, or specifications of the contract; or
  - (5) Interferes with the Contractor's rights to perform the terms and conditions of the contract.
- (c) All technical direction shall be issued in writing by the COTR.
- (d) The Contractor shall proceed promptly with the performance of technical direction duly issued by the COTR in the manner prescribed by this clause and within the COTR's authority.

If, in the Contractor's opinion, any instruction or direction by the COTR falls within any of the categories defined in paragraph (b) above, the Contractor shall not proceed but shall notify the Contracting Officer in writing within 5 working days after receiving it and shall request the Contracting Officer to take action as described in this clause. Upon receiving this notification, the Contracting Officer shall either issue an appropriate contract modification within a reasonable time or advise the Contractor in writing within 30 days that the instruction or direction is--

- (1) Rescinded in its entirety; or
  - (2) Within the requirements of the contract and does not constitute a change under the changes clause of the contract, and that the Contractor should proceed promptly with its performance.
- (e) A failure of the Contractor and Contracting Officer to agree that the instruction or direction is both within the requirements of the contract and does not constitute a change under the changes clause, or a failure to agree upon the contract action to be taken with respect to the instruction or direction, shall be subject to the Disputes clause of this contract.
- (f) Any action(s) taken by the Contractor in response to any direction given by any person other than the Contracting Officer or the COTR shall be at the Contractor's risk.

6. FINANCIAL REPORTING OF NASA PROPERTY IN THE CUSTODY OF CONTRACTORS  
(NFS 1852.245-73) (AUG 2001)

- (a) The Contractor shall submit annually a NASA Form (NF) 1018, NASA Property in the Custody of Contractors, in accordance with the provisions of 1845.505-14, the instructions on the form, subpart 1845.71, and any supplemental instructions for the current reporting period issued by NASA.
- (b)(1) Subcontractor use of NF 1018 is not required by this clause; however, the Contractor shall include data on property in the possession of subcontractors in the annual NF 1018.
- (2) The Contractor shall mail the original signed NF 1018 directly to the cognizant NASA Center Deputy Chief Financial Officer unless the Contractor uses the NF 1018 Electronic Submission System (NESS) for report preparation and submission.
- (3) One copy shall be submitted (through the Department of Defense (DOD) Property Administrator if contract administration has been delegated to DOD) to the following address: Attn: Industrial Property Office; NASA, Langley Research Center; Mail Stop 377; Hampton, Virginia 23681-2199, unless the Contractor uses the NF 1018 Electronic Submission System (NESS) for report preparation and submission.

(c) The annual reporting period shall be from October 1 of each year through September 30 of the following year. The report shall be submitted in time to be received by October 31. The information contained in these reports is entered into the NASA accounting system to reflect current asset values for Agency financial statement purposes. Therefore, it is essential that required reports be received no later than October 31. The Contracting Officer may, in NASA's interest, withhold payment until a reserve not exceeding \$25,000, or 5 percent of the amount of the contract, whichever is less, has been set aside, if the Contractor fails to submit annual NF 1018 reports in accordance with 1845.505-14 and any supplemental instructions for the current reporting period issued by NASA. Such reserve shall be withheld until the Contracting Officer has determined that the required reports have been received by NASA. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Government right.

(d) A final report shall be submitted within 30 days after disposition of all property subject to reporting when the contract performance period is complete in accordance with (b)(1) through (3) of this clause.

## SECTION H - SPECIAL CONTRACT REQUIREMENTS

### 1. LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

#### I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
------------------	------	-------

None included by reference.

#### II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
1852.204-74	MAY 2002	CENTRAL CONTRACTOR REGISTRATION
1852.223-70	APR 2002	SAFETY AND HEALTH
1852.223-74	MAR 1996	DRUG- AND ALCOHOL-FREE WORKFORCE
1852.223-75	FEB 2002	MAJOR BREACH OF SAFETY OR SECURITY
1852.225-70	FEB 2000	EXPORT LICENSES
		Insert in Paragraph (b): Dryden Flight Research Center
1852.244-70	APR 1985	GEOGRAPHIC PARTICIPATION IN THE AEROSPACE PROGRAM

### 2. SECURITY CLASSIFICATION REQUIREMENTS (NASA 1852.204-75) (SEP 1989)

Performance under this contract will involve access to and/or generation of classified information, work in a security area, or both, up to the level of Secret. See Federal Acquisition Regulation clause 52.204-2 in this contract and DD Form 254, Contract Security Classification Specification, Attachment Exhibit B.

### 3. KEY PERSONNEL AND FACILITIES (NASA 1852.235-71) (MAR 1989)

(a) The personnel and/or facilities listed below (or specified in the contract Schedule) are considered essential to the work being performed under this contract. Before removing, replacing, or diverting any of the listed or specified personnel or facilities, the Contractor shall (1) notify the Contracting Officer reasonably in advance and (2) submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on this contract.

(b) The Contractor shall make no diversion without the Contracting Officer's written consent; provided, that the Contracting Officer may ratify in writing the proposed change, and that ratification shall constitute the Contracting Officer's consent required by this clause.

(c) The list of personnel and/or facilities (shown below or as specified in the contract Schedule) may, with the consent of the contracting parties, be amended from time to time during the course of the contract to add or delete personnel and/or facilities.

---

---

---

4. UNESCORTED ACCESS BY U.S CITIZEN CONTRACTOR EMPLOYEES (LaRC 52.204-102)  
(NOV 2002)

Visits by U.S. citizen contractor employees that are expected will exceed 90 days will require the employee to undergo a Background Investigation. All Contractor employees must, as a minimum, have a favorably adjudicated NASA Agency Check (NAC). However, a NAC is not required if the Contractor can certify that an employee has an active United States Government Security Clearance, (IAW requirements of Executive Order #12968), or has been the subject of a prior favorable NAC investigation.

For contractor employees requiring a NAC, the Contractor shall require its employees to submit a "Name Check Request" (NASA Form 531), an "Authorization for Release of Credit Reports" (NASA Form 1684), and a completed FD-258, "Applicant Fingerprint Card" to the LaRC Badge and Pass Office, Mail Stop 232. Fingerprint cards will be completed at the Badge and Pass Office only. Normal processing time for a NASA NAC is approximately 60 days.

5. (LIMITED) RELEASE OF CONTRACTOR CONFIDENTIAL BUSINESS INFORMATION (CBI)  
(LaRC 52.204-104) (JAN 2002)

(a) NASA may find it necessary to release information submitted by the Contractor, either in response to this solicitation or pursuant to the provisions of this contract, to individuals not employed by NASA. Business information that would ordinarily be entitled to confidential treatment may be included in the information released to these individuals. Accordingly, by submission of this proposal, or signature on this contract or other contracts, the Contractor hereby consents to a limited release of its Confidential Business Information (CBI).

(b) Possible circumstances where the Agency may release the Contractor's CBI include, but are not limited to, the following:

(1) To other Agency contractors, subcontractors, and their employees tasked with assisting the Agency in handling and processing information and documents in the evaluation, the award or the administration of Agency contracts, such as providing both preaward and post award audit support and specialized technical support to NASA's technical evaluation panels;

(2) To NASA contractors, subcontractors, and their employees engaged in information systems analysis, development, operation, and maintenance, including performing data processing and management functions for the Agency.

(c) NASA recognizes its obligation to protect the Contractor from competitive harm that could result from the release of such information to a competitor. Except where otherwise provided by law, NASA will permit the limited release of CBI under subparagraphs (1) or (2) only pursuant to non-disclosure agreements signed by the assisting contractor, subcontractor, or their individual employees who may require access to the CBI to perform the assisting contract.

(d) NASA's responsibilities under the Freedom of Information Act are not affected by this clause.

(e) The Contractor agrees to include this clause, including this paragraph (e), in all subcontracts at all levels awarded pursuant to this contract that require the furnishing of CBI by the subcontractor.

6. SECURITY PROGRAM/NON-U.S. CITIZEN EMPLOYEE ACCESS REQUIREMENTS (LaRC 52.204-91) (JUL 2002)

a. Access to the LaRC by Contractor non-U.S. citizen employees, including employees in permanent resident alien status, shall be approved in accordance with NPG 1371.2 and LMS-CP-4850. Administrative processing requires advance notice of between 20 to 45 days depending on the nationality of the non-U.S. citizen. Access authorization shall be for a maximum of one year and must be reevaluated annually. Non-U.S. citizen employees must be under escort at all times while on Center by a U.S. citizen issued a LaRC identification badge.

b. Request for Center access in excess of 90 days requires that a background investigation be conducted on the non-U.S. citizen employee. The processing of a background investigation requires the submittal of a NASA Form 531, "Name Check Request," and a FD-258, fingerprint card application. Normal processing time for a background investigation is approximately 90 days. A favorably adjudicated background investigation shall allow non-U.S. citizen Contractor employee limited unescorted access to the Center. Access shall be limited to work areas identified and deemed necessary and entry and egress to that site.

7. SECURITY REGISTRATION AND IDENTIFICATION BADGES--ON-SITE CONTRACTORS, EXCLUDING CONSTRUCTION (DFRC 52.204-90) (FEB 2001)

(a) All persons engaged in work at Dryden Flight Research Center are required to be registered and badged by the Security Office, and to follow all security regulations and requirements.

(b) The Contractor is responsible for assuring that each employee or company representative wears his/her issued identification badge at all times while they are within the boundaries Dryden Flight Research Center. Badges shall be worn above the waist in such a manner as to be clearly visible.

(c) (1) The Contractor shall ensure that all employees who are terminated or who are no longer connected with the work being performed under this contract are processed out through the Security Office. Badges, keys, vehicle passes/decals, and other Government property must be accounted for and returned. If a computer account has been established, the account must be deactivated.

(2) The Government shall notify the Contractor if any terminated employee has not been processed out through the Security Office Check-out Procedures. The Contractor then has 30 days in which to process the terminated employee without penalty. After 30 days, a Bill of Collection will be issued by the Government in the amount of \$500 for each terminated employee that has not been properly processed out.

(d) U.S. Citizens and Permanent Resident Aliens. On the first day of work, the employee will check in at the NASA Visitor Badging Office, Building 4825. A temporary badge will be issued and the employee will be directed to the work site. As soon as practical, the employee must bring the completed "Non-Government Employee Security Badging Packet," NASA Form 531 to the Employee Badging Office (Building 4825). Employees will need to submit a completed packet for each badge issued, including renewals. Fingerprints will be taken if necessary and a permanent badge will be issued. All terminating employees must check out through the Employee Badging Office.

(e) Foreign Nationals (Passports, Visas, Non-Immigrant Aliens). A National Agency Check (NAC) is a prerequisite for a foreign national, making it necessary that all paperwork be submitted to the Security Office, Code XAS, M/S D-4825, at least 60 days in advance of the anticipated entry date. The Security Office will provide guidance as to what paperwork and type of visa are required.

(f) Reserve Gate Procedure. In the event of a labor dispute the Government may restrict entrance and exit of the Contractor's employees and the Contractor's suppliers to a specified gate at Dryden Flight

Research Center, pursuant to Chapter 4 of NASA Handbook 5200.1A, "Industrial Labor Relations Manual." The Contractor agrees to have all employees rebadged and to direct them and their suppliers to utilize only the designated gate.

8. INCORPORATION OF SECTION K OF THE PROPOSAL BY REFERENCE (LaRC 52.215-107) (NOV 2002)

Pursuant to FAR 15.204-1(b), the completed Section K of the proposal is hereby incorporated herein by reference.

9. SMALL DISADVANTAGED BUSINESS PARTICIPATION--CONTRACT TARGETS (LaRC 52.219-91) (OCT 2002)

(a) This clause does not apply to, and should not be completed by, Small Disadvantaged Business (SDB) offerors unless the SDB offeror has waived the price adjustment evaluation adjustment [see Paragraph (c) of FAR clause 52.219-23].

(b) FAR 19.1202-4(a) requires that SDB participation targets be incorporated in the contract. Targets for this contract are as follows: (See Internet at <http://www.census.gov/epcd/www/naics.html> for Department of Commerce NAICS Industry Subsectors.)

Department of Commerce NAICS Industry Subsectors	Dollar Target	Percent of Contract Value

(c) FAR 19.1202-4(b) requires that SDB concerns that are specifically identified by the Offeror be listed in the contract when the extent of the identification of such subcontractors was part of the SDB evaluation subfactor. SDB concerns (subcontractors) specifically identified by the Offeror are as follows:

Name of Concern(s):

\_\_\_\_\_TBD\_\_\_\_\_

\_\_\_\_\_

The Contractor shall notify the Contracting Officer of any substitutions of firms that are not SDB concerns.

(d) If the prime offeror is an SDB (including joint venture partners and team members) that has waived the price evaluation adjustment, the target for the work it intends to perform as a prime contractor in NAICS Industry Subsectors, as determined by the Commerce Department, is as follows:

Dollars	Percent of Contract Value

10. ADVANCE REVIEW FOR RELEASE OF TECHNICAL INFORMATION (LaRC 52.227-92) (JUL 2002)

The Contractor shall submit technical information regarding the contract effort, such as journal articles, meeting papers, and technical documents to the Contracting Officer's Technical Representative (COTR) for review and comment prior to publication, presentation or release to others. The COTR will have 30

days from submission to review all material proposed for publication and submit comments to the Contractor which will be given full consideration before publishing.

11. QUALITY MANAGEMENT SYSTEM COMPLIANCE REQUIREMENTS (ISO 9001:2000) (LaRC 52.246-96) (September 2002)

The Contractor's quality system shall be compliant with the requirements of the current ANSI/ISO/ASQC Q ISO 9001 standard, *Quality Management Systems Requirements*.

Since the Contractor's quality system is not already compliant with the requirements of the current ANSI/ISO/ASQC Q ISO 9001 standard, the Contractor shall develop quality system procedures and associated documentation to become compliant within nine months after the contract effective date.

Once compliance with the current ANSI/ISO/ASQC Q ISO 9001 has been achieved, an updated Quality System Manual and final documentation (addressing the topics noted in the Contractor's compliance plan) should be submitted for review and acceptance.

The Contractor's quality system shall remain in compliance with the ISO 9001 standard during the term of the contract. The Government reserves the right to audit the Contractor's quality system at any time.

"Compliant" as used in this clause means that the Contractor has defined, documented, and will continually implement during the term of the contract management-approved methods of operation that conform to the requirements given in the above-cited International Standard.

OR

QUALITY MANAGEMENT SYSTEM REQUIREMENTS (ISO 9001:2000) (LaRC 52.246-97) (September 2002)

The Contractor's quality system shall be compliant with the requirements of the current ANSI/ISO/ASQC Q ISO 9001 standard, *Quality Management Systems Requirements*.

The Contractor's quality system shall remain in compliance with the ISO 9001 standard during the term of the contract. The Government reserves the rights to audit the Contractor's quality system at any time

"Compliant" as used in this clause means that the Contractor has defined, documented, and will continually implement during the term of the contract management-approved methods of operation that conform to the requirements given in the above-cited International Standard.

12. GOVERNMENT FURNISHED INFORMATION (GFI)

Item ID	GFI Description	Configuration Item (CI)	Delivery from Effective Date of Contract
X43C-GFI-001	DV/Adapter OML Definition	Yes	1 week
X43C-GFI-002	DV/Adapter Aerodynamic Databases (Initial delivery and schedule for updates)	Yes	1 month
X43C-GFI-003	Separation Wind Tunnel Aero Database	Yes	21 months
X43C-GFI-004	DV/Adapter Candidate Conceptual Design Package (including propulsion subsystem)	No	1 week
X43C-GFI-005	DV/Adapter Ground & Captive Carry Loads Definition	Yes	1 month
X43C-GFI-006	DV Conceptual Design Trajectory Definitions	No	1 week
X43C-GFI-007	DV Propulsion Flowpath OML Definition (Classified)	Yes	1 week

X43C-GFI-009	Booster Interface Requirements	Yes	1 month
X43C-GFI-010	Booster Finite Element Model	Yes	2 months

### 13. LIMITATION OF LIABILITY – HIGH VALUE ITEMS

As prescribed in FAR 46.805(a), the following deliverable items under the contract are designated as high value items:

Demonstrator Vehicles  
Adapters  
Flight Clearance Engine

### 14. ENABLING CLAUSE BETWEEN PRIME CONTRACTOR AND BOOSTER CONTRACTOR

(a) NASA has entered into a contract with **TBD** for the booster and launch services.

(b) In the performance of this contract, the Contractor agrees to cooperate with **TBD** by: supporting booster-to-demonstrator vehicle integration including the generation and maintenance of the interface documentation; participate in technical interchange meetings and reviews; providing access to technical information and planning data, test data and results, schedule and milestone data; discussing technical matters related to the project; providing access to Contractor facilities utilized in the performance of this contract; and allowing observation of technical activities by appropriate support Contractor technical personnel.

(c) The Contractor further agrees to include in each subcontract over \$1 million or 10 percent of prime contract value, whichever is less, a clause requiring compliance by a subcontractor and succeeding levels of subcontractors with the response and access provisions of paragraph (b) above, subject to coordination with the Contractor. This agreement does not relieve the Contractor of responsibility to manage subcontracts effectively and efficiently, nor is it intended to establish privity of contracts between the Government or the service Contractor(s) and such subcontractors.

(d) Contractor personnel are not authorized to direct another Contractor in any manner.

(e) To the extent that the work under this contract requires access to proprietary information, and as long as these data remain proprietary, the Contractor shall protect the data from unauthorized use and disclosure.

(f) Neither the Contractor nor their subcontractors shall be required in the satisfaction of the requirements of this clause to perform any effort or supply any documentation not otherwise required by their contract or subcontract.

## PART II - CONTRACT CLAUSES

### SECTION I - CONTRACT CLAUSES

#### 1. LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

#### I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.202-1	DEC 2001	DEFINITIONS
52.203-3	APR 1984	GRATUITIES
52.203-5	APR 1984	COVENANT AGAINST CONTINGENT FEES
52.203-6	JUL 1995	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT
52.203-7	JUL 1995	ANTI-KICKBACK PROCEDURES

52.203-8	JAN 1997	CANCELLATION, RESCISSION AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-10	JAN 1997	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-12	JUN 1997	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS
52.204-2	AUG 1996	SECURITY REQUIREMENTS
52.204-4	AUG 2000	PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER
52.209-6	JUL 1995	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT
52.215-2	JUN 1999	AUDIT AND RECORDS --NEGOTIATION
52.215-8	OCT 1997	ORDER OF PRECEDENCE - UNIFORM CONTRACT FORMAT
52.215-14	OCT 1997	INTEGRITY OF UNIT PRICES
52.215-15	DEC 1998	PENSION ADJUSTMENTS AND ASSET REVERSIONS
52.215-17	OCT 1997	WAIVER OF FACILITIES CAPITAL COST OF MONEY
52.215-18	OCT 1997	REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS
52.215-19	OCT 1997	NOTIFICATION OF OWNERSHIP CHANGES
52.215-21	OCT 1997	REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA -- MODIFICATIONS
52.216-7	FEB 2002	ALLOWABLE COST AND PAYMENT
	Insert 30 <sup>th</sup> day in Paragraph (a)(3).	
52.216-10	MAR 1997	INCENTIVE FEE
	Insert "___TBD___", "___TBD___", "___TBD___", and "zero (0)", respectively, in Paragraph (e)(1).	
52.219-4	JAN 1999	NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS
52.219-8	OCT 2000	UTILIZATION OF SMALL BUSINESS CONCERNS
52.219-9	JAN 2002	SMALL BUSINESS SUBCONTRACTING PLAN (ALTERNATE II) (OCT 2001)
52.219-16	JAN 1999	LIQUIDATED DAMAGES SUBCONTRACTING PLAN
52.219-23	MAY 2001	NOTICE OF PRICE EVALUATION ADJUSTMENT FOR SMALL DISADVANTAGED BUSINESS CONCERNS The evaluation adjustment factor inserted in paragraph (b)(1) is 10%.
52.219-25	OCT 1999	SMALL DISADVANTAGED BUSINESS PARTICIPATION PROGRAM - DISADVANTAGED STATUS AND REPORTING
52.222-1	FEB 1997	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES
52.222-2	JUL 1990	PAYMENT FOR OVERTIME PREMIUMS
	Insert "zero (0)" in paragraph (a).	
52.222-3	AUG 1996	CONVICT LABOR
52.222-21	FEB 1999	PROHIBITION OF SEGREGATED FACILITIES
52.222-26	APR 2002	EQUAL OPPORTUNITY
52.222-35	DEC 2001	EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS
52.222-36	JUN 1998	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES
52.222-37	DEC 2001	EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND



52.223-3	JAN 1997	OTHER ELIGIBLE VETERANS HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (ALTERNATE I) (JUL 1995)
		Insert "NONE" in paragraph (b).
52.223-6	MAY 2001	DRUG-FREE WORKPLACE
52.223-14	OCT 2000	TOXIC CHEMICAL RELEASE REPORTING
52.225-1	MAY 2002	BUY AMERICAN ACT--SUPPLIES
52.225-13	JUL 2000	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES
52.225-16	FEB 2000	SANCTIONED EUROPEAN UNION COUNTRY SERVICES
52.227-1	JUL 1995	AUTHORIZATION AND CONSENT (ALTERNATE I) (APR 1984)
52.227-2	AUG 1996	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT
52.227-11	JUN 1997	PATENT RIGHTS--RETENTION BY THE CONTRACTOR (SHORT FORM) (AS MODIFIED BY NFS 1852.227-11) (MAY 2002)
52.227-14	JUN 1987	RIGHTS IN DATA--GENERAL ALTERNATE II (JUN 1987) ALTERNATE III (JUN 1987) AS MODIFIED BY 1852.227- 14 NASA FAR SUPPLEMENT (OCT 1995)
52.227-16	JUN 1987	ADDITIONAL DATA REQUIREMENTS
52.228-7	MAR 1996	INSURANCE--LIABILITY TO THIRD PERSONS
52.230-2	APR 1998	COST ACCOUNTING STANDARDS
52.230-6	NOV 1999	ADMINISTRATION OF COST ACCOUNTING STANDARDS
52.232-9	APR 1984	LIMITATION ON WITHHOLDING OF PAYMENTS
52.232-17	JUN 1996	INTEREST
52.232-22	APR 1984	LIMITATION OF FUNDS
52.232-23	JAN 1986	ASSIGNMENT OF CLAIMS
52.232-25	FEB 2002	PROMPT PAYMENT
52.232-34	MAY 1999	PAYMENT BY ELECTRONIC FUNDS TRANSFER-- OTHER THAN CENTRAL CONTRACTOR REGISTRATION
52.233-1	JUL 2002	DISPUTES (ALTERNATE I) (DEC 1991)
52.233-3	AUG 1996	PROTEST AFTER AWARD (ALTERNATE I) (JUN 1985)
52.242-1	APR 1984	NOTICE OF INTENT TO DISALLOW COSTS
52.242-2	APR 1991	PRODUCTION PROGRESS REPORTS
52.242-3	MAY 2001	PENALTIES FOR UNALLOWABLE COSTS
52.242-4	JAN 1997	CERTIFICATION OF FINAL INDIRECT COSTS
52.242-13	JUL 1995	BANKRUPTCY
52.243-2	AUG 1987	CHANGES--COST-REIMBURSEMENT (ALTERNATE V) (APR 1984)
52.244-2	AUG 1998	SUBCONTRACTS (ALTERNATE I) (AUG 1998)
52.244-5	DEC 1996	COMPETITION IN SUBCONTRACTING
52.244-6	MAY 2002	SUBCONTRACTS FOR COMMERCIAL ITEMS
52.245-5	JAN 1986	GOVERNMENT PROPERTY (COST-REIM- BURSEMENT, TIME-AND-MATERIAL, OR LABOR- HOUR CONTRACTS)
52.246-23	FEB 1997	LIMITATION OF LIABILITY
52.246-24	FEB 1997	LIMITATION OF LIABILITY-- HIGH VALUE ITEMS (ALTERNATE I) (APR 1984)
52.247-1	APR 1984	COMMERCIAL BILL OF LADING NOTATIONS
52.249-6	SEP 1996	TERMINATION (COST-REIMBURSEMENT)
52.249-14	APR 1984	EXCUSABLE DELAYS
52.253-1	JAN 1991	COMPUTER GENERATED FORMS

## II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
1852.203-70	JUN 2001	DISPLAY OF INSPECTOR GENERAL HOTLINE POSTERS
1852.216-89	JUL 1997	ASSIGNMENT AND RELEASE FORMS
1852.219-74	SEP 1990	USE OF RURAL AREA SMALL BUSINESSES
1852.219-76	JUL 1997	NASA 8 PERCENT GOAL
1852.235-70	FEB 2003	CENTER FOR AEROSPACE INFORMATION
1852.235-73	FEB 2003	FINAL SCIENTIFIC AND TECHNICAL REPORTS (ALTERNATE II) (FEB 2003)
1852.242-75	MAR 1999	EARNED VALUE MANAGEMENT SYSTEM
	Insert in Paragraph (f): _____TBD_____	
1852.243-71	MAR 1997	SHARED SAVINGS
1852.245-70	JUL 1997	CONTRACTOR REQUESTS FOR GOVERNMENT-OWNED EQUIPMENT

2. RIGHTS TO PROPOSAL DATA (TECHNICAL) (FAR 52.227-23) (JUN 1987)

Except for data contained on pages \_\_\_\_\_, it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data-General" clause contained in this contract) in and to the data contained in the proposal dated \_\_\_\_\_ upon which this contract is based.

3. SUBMISSION OF COMMERCIAL TRANSPORTATION BILLS TO THE GENERAL SERVICES ADMINISTRATION FOR AUDIT (FAR 52.247-67) (JUN 1997)

(a)(1) In accordance with paragraph (a)(2) of this clause, the Contractor shall submit to the General Services Administration (GSA) for audit, legible copies of all paid freight bills/invoices, commercial bills of lading (CBL's), passenger coupons, and other supporting documents for transportation services on which the United States will assume freight charges that were paid (i) by the Contractor under a cost-reimbursement contract and (ii) by a first-tier subcontractor under a cost-reimbursement subcontract thereunder.

(2) Cost-reimbursement Contractors shall only submit for audit those CBL's with freight shipment charges exceeding \$50.00. Bills under \$50.00 shall be retained on-site by the Contractor and made available for GSA on-site audits. This exception only applies to freight shipment bills and is not intended to apply to bills and invoices for any other transportation services.

(b) The Contractor shall forward copies of paid freight bills/invoices, CBL's, passenger coupons, and supporting documents as soon as possible following the end of the month, in one package to the General Services Administration, ATTN: FWA, 1800 F Street, NW, Washington, DC 20405. The Contractor shall include the paid freight bills/invoices, CBL's, passenger coupons, and supporting documents for first-tier subcontractors under a cost-reimbursement contract. If the inclusion of the paid freight bill/invoices, CBL's passenger coupons, and supporting documents for any subcontractor in the shipment is not practicable, the documents may be forwarded to GSA in a separate package.

(c) Any original transportation bills or other documents requested by GSA shall be forwarded promptly by the Contractor to GSA. The Contractor shall ensure that the name of the contracting agency is stamped or written on the face of the bill before sending it to GSA.

(d) A statement prepared in duplicate by the Contractor shall accompany each shipment of transportation documents. GSA will acknowledge receipt of the shipment by signing and returning the copy of the statement. The statement shall show--

- (1) The name and address of the Contractor;
- (2) The contract number including any alpha-numeric prefix identifying the contracting office;
- (3) The name and address of the contracting office;
- (4) The total number of bills submitted with the statement; and
- (5) A listing of the respective amounts paid or, in lieu of such listing, an adding machine tape of the amounts paid showing the Contractor's voucher or check numbers.

4. CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<http://www.arnet.gov/far/>

<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

5. AUTHORIZED DEVIATIONS IN CLAUSES (FAR 52.252-6) (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any \_\_\_\_\_ (48 CFR Chapter \_\_\_\_\_) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

6. OMBUDSMAN (NFS 1852.215-84) (JUN 2000)

(a) An ombudsman has been appointed to hear and facilitate the resolution of concerns from offerors, potential offerors, and contractors during the pre-award and post-award phases of this acquisition. When requested, the ombudsman will maintain strict confidentiality as to the source of the concern. The existence of the ombudsman is not to diminish the authority of the Contracting Officer, the Source Evaluation Board, or the selection official. Further, the ombudsman does not participate in the evaluation of proposals, the source selection process, or the adjudication of formal contract disputes. Therefore, before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the Contracting Officer for resolution.

(b) If resolution cannot be made by the Contracting Officer, interested parties may contact the installation ombudsman, Christine Darden. Direct inquiries to Panice Clark, NASA Langley Research Center, Mail Stop 134, Hampton, VA 23681-2199; phone (757) 864-2522; facsimile (757) 864-8541; email [p.h.clark@larc.nasa.gov](mailto:p.h.clark@larc.nasa.gov).

Concerns, issues, disagreements, and recommendations which cannot be resolved at the installation may be referred to the NASA ombudsman, the Director of the Contract Management Division, at 202-358-0422, facsimile 202-358-3083, e-mail [sthomps1@hq.nasa.gov](mailto:sthomps1@hq.nasa.gov). Please do not contact the ombudsman to request copies of the solicitation, verify offer due date, or clarify technical requirements. Such inquiries shall be directed to the Contracting Officer or as specified elsewhere in this document.

7. SMALL BUSINESS SUBCONTRACTING REPORTING (NFS 1852.219-75) (MAY 1999)

(a) The Contractor shall submit the Summary Subcontract Report (Standard Form (SF) 295) semiannually for the reporting periods specified in block 4 of the form. All other instructions for SF 295 remain in effect.

**1-50-OCB.1148**

(b) The Contractor shall include this clause in all subcontracts that include the clause at FAR 52.219-9.

**PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS**

**SECTION J - LIST OF ATTACHMENTS**

Exhibit A	Statement of Work, (date), (pages)
Exhibit B	Contract Security Classification Specification, DD Form 254, 2 pages
Exhibit C	Subcontracting Plan, XX pages
Exhibit D	Incentive Fee Plan, 2 pages
Exhibit E	Safety and Health Plan, X pages

---

The following are located after the last section of this solicitation:

Attachment 1	Past Performance Questionnaire, 5 pages
Attachment 2	Safety and Health Plan Instructions, 1 page
Attachment 3	Cost Forms, 14 pages
Attachment 4	Questions and Answers, 3 pages

**EXHIBIT D**  
**X-43C Hypersonic Demonstrator Vehicle**  
**Incentive Fee Plan**

The incentive fee structure shall include incentives for cost and technical performance as follows:

1. Cost Performance (40% of the fee pool)
2. Technical Performance (60% of the fee pool)

There will be no rollover of unearned fee between elements. The incentive fee will be provisionally paid to the Contractor monthly at a rate not to exceed X percent (X%) of incurred costs (subject to limitations of this plan). The incentive fee for each element is described below.

**A. Cost Performance**

The share ratio for the cost performance incentive is set forth in Federal Acquisition Regulation (FAR) Clause 52.216-10 Incentive Fee (Feb 1997). Fees offered as incentives on cost performance are described as follows:

- a) Target Fee: The target fee that may be achieved by the Contractor for maintaining actual costs at target cost is \$XX.
- b) Maximum Fee: The maximum fee that may be achieved by the Contractor for cost underruns is \$XX.
- c) Minimum Fee: The minimum fee is zero.

**B. Technical Performance**

An incentive fee of \$XX is offered for technical performance based upon NASA FAR Supplement (NFS) Clause 18-52.216-88 Performance Incentive.

**Standard Performance Level:**

At the standard performance level, the Contractor has delivered each of three (3) fully fabricated, assembled, integrated, and verified X-43C demonstrator vehicles with associated adapters to the Government in accordance with the SOW. This shall include the successful completion of required design reviews and delivery of all required contract documentation. At the standard performance level, neither a positive or negative incentive will apply.

**Positive Incentive:**

**Demonstrator Vehicle and Adapter for Flight 1 (35% of technical performance incentive pool)**

Incentive Description 1	\$XX (25% of Flight 1 fee pool)
Incentive Description 2	\$XX (60% of Flight 1 fee pool)
Incentive Description 3	\$XX (80% of Flight 1 fee pool)
Incentive Description 4	\$XX (95% of Flight 1 fee pool)
Incentive Description 5	\$XX (100% of Flight 1 fee pool)
Incentive Description 6	\$XX (100% of Flight 1 fee pool)

**Demonstrator Vehicle and Adapter for Flight 2 (35% of technical performance incentive pool)**

Incentive Description 1	\$XX (15% of Flight 2 fee pool)
Incentive Description 2	\$XX (55% of Flight 2 fee pool)
Incentive Description 3	\$XX (75% of Flight 2 fee pool)
Incentive Description 4	\$XX (90% of Flight 2 fee pool)

Incentive Description 5	\$XX (100% of Flight 2 fee pool)
Incentive Description 6	\$XX (100% of Flight 2 fee pool)

Demonstrator Vehicle and Adapter for Flight 3 (30% of technical performance incentive pool)

Incentive Description 1	\$XX (5% of Flight 3 fee pool)
Incentive Description 2	\$XX (50% of Flight 3 fee pool)
Incentive Description 3	\$XX (70% of Flight 3 fee pool)
Incentive Description 4	\$XX (85% of Flight 3 fee pool)
Incentive Description 5	\$XX (100% of Flight 3 fee pool)
Incentive Description 6	\$XX (100% of Flight 3 fee pool)

**Incentive Descriptions**

1. The demonstrator vehicle and adapter successfully pass Government validation testing. This includes Contractor support of the testing and correction of defects/anomalies discovered as required by the SOW.
2. The flight demonstration objectives were achieved as follows:
  - a. Incentive description 1 was accomplished
  - b. Successful separation from the booster where the DV was delivered within 3-sigma limits of required separation conditions
  - c. Controlled flight on mission flight path for engine testing
  - d. Cowl opening
  - e. Successful ignition of the scramjet
  - f. Stable combustion of hydrocarbon fuel for a minimum of 30 seconds
3. The flight demonstration objectives were achieved as follows:
  - a. Incentive description 2 was accomplished
  - b. Continued controlled flight on mission flight path and acceleration to at least Mach 6.5
4. The flight demonstration objectives were achieved as follows:
  - a. Incentive description 3 was accomplished
  - b. Continued controlled flight on mission flight path and acceleration to at least Mach 7
5. The flight demonstration objectives were achieved as follows:
  - a. Incentive description 4 was accomplished
  - b. Cowl closure
  - c. Controlled flight in un-powered mode through mission descent phase, including performance of planned maneuvers to Mach 3 or lower velocity
6. The flight demonstration objectives were not successfully accomplished through no fault of the Contractor.

**Negative Incentive:**

For each vehicle and adapter that fails to achieve the Standard Performance Level, the Contactor shall pay the Government 10% of the technical performance fee pool for each vehicle and adapter. The maximum negative performance incentive will not exceed the total earned fee under this contract.

## **PART IV - REPRESENTATIONS AND INSTRUCTIONS**

### **SECTION K - REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS**

#### **1. CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (FAR 52.203-11) (APR 1991)**

(a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this certification.

(b) The Offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief that on or after December 23, 1989,--

(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement;

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the Offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and

(3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.

(c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure form to be filed or amended by this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

#### **2. TAXPAYER IDENTIFICATION (FAR 52.204-3) (OCT 1998)**

(a) Definitions.

"Common parent," as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the Offeror is a member.

"Taxpayer Identification Number (TIN)," as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the Offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

(b) All offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment reporting requirements described in Federal Acquisition Regulation (FAR) 4.904, the failure or refusal by the Offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.



(c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the Offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the Offeror's TIN.

(d) Taxpayer Identification Number (TIN).

☐ TIN: \_\_\_\_\_.

☐ TIN has been applied for.

☐ TIN is not required because:

☐ Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

☐ Offeror is an agency or instrumentality of a foreign government;

☐ Offeror is an agency or instrumentality of the Federal Government.

(e) Type of organization.

☐ Sole proprietorship;

☐ Partnership;

☐ Corporate entity (not tax-exempt);

☐ Corporate entity (tax-exempt);

☐ Government entity (Federal, State, or local);

☐ Foreign government;

☐ International organization per 26 CFR 1.6049-4;

☐ Other \_\_\_\_\_.

(f) Common parent.

☐ Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.

☐ Name and TIN of common parent:

Name \_\_\_\_\_

TIN \_\_\_\_\_

3. WOMEN-OWNED BUSINESS (OTHER THAN SMALL BUSINESS) (FAR 52.204-5) (MAY 1999)

(a) Definition. "Women-owned business concern," as used in this provision, means a concern that is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

(b) Representation. [Complete only if the Offeror is a women- owned business concern and has not represented itself as a small business concern in paragraph (b)(1) of FAR 52.219-1, Small Business Program Representations, of this solicitation.] The Offeror represents that it [ ] is a women-owned business concern.

4. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS (FAR 52.209-5) (DEC 2001)

(a)(1) The Offeror certifies, to the best of its knowledge and belief, that-

(i) The Offeror and/or any of its Principals-

(A) Are [ ] are not [ ] presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(B) Have [ ] have not [ ], within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(C) Are [ ] are not [ ] presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision.

(ii) The Offeror has [ ] has not [ ], within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

This certification concerns a matter within the jurisdiction of an agency of the United States and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Section 1001, Title 18, United States Code.

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

5. PLACE OF PERFORMANCE (FAR 52.215-6) (OCT 1997)

(a) The Offeror or respondent, in the performance of any contract resulting from this solicitation, ☐ intends, ☐ does not intend [check applicable block] to use one or more plants or facilities located at a different address from the address of the Offeror or respondent as indicated in this proposal or response to request for information.

(b) If the Offeror or respondent checks "intends" in paragraph

(a) of this provision, it shall insert in the following spaces the required information:

Place of performance (Street Address, City, State, County, Zip Code)	Name and Address of Owner and Operator of the Plant or Facility if Other Than Offeror or Respondent

6. SMALL BUSINESS PROGRAM REPRESENTATIONS (FAR 52.219-1) (APR 2002)  
(ALTERNATE I) (APR 2002)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is **541710**.

(2) The small business size standard is **1,500 employees**.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b) Representations. (1) The Offeror represents as part of its offer that it ☐ is, ☐ is not a small business concern.

(2) [Complete only if the Offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The Offeror represents, for general statistical purposes, that it ☐ is, ☐ is not, a small disadvantaged business concern as defined in 13 CFR 124.1002.

(3) [Complete only if the Offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The Offeror represents as part of its offer that it ☐ is, ☐ is not a women-owned small business concern.

(4) [Complete only if the Offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The Offeror represents as part of its offer that it ☐ is, ☐ is not a veteran-owned small business concern.

(5) [Complete only if the Offeror represented itself as a veteran-owned small business concern in paragraph (b)(4) of this provision.] The Offeror represents as part of its offer that it ☐ is, ☐ is not a service-disabled veteran-owned small business concern.

(6) [Complete only if Offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The Offeror represents, as part of its offer, that--

(i) It ☐ is, ☐ is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal office, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR Part 126; and

(ii) It [ ] is, [ ] is not a joint venture that complies with the requirements of 13 CFR Part 126, and the representation in paragraph (b)(6)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. [The Offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture: \_\_\_\_\_.] Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

(7) [Complete if Offeror represented itself as disadvantaged in paragraph (b)(2) of this provision.] The Offeror shall check the category in which its ownership falls:

\_\_\_\_\_ Black American.

\_\_\_\_\_ Hispanic American.

\_\_\_\_\_ Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).

\_\_\_\_\_ Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

\_\_\_\_\_ Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal).

\_\_\_\_\_ Individual/concern, other than one of the preceding.

(c) Definitions. As used in this provision--

"Service-disabled veteran-owned small business concern"--

(1) Means a small business concern--

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern" means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR part 121 and the size standard in paragraph

(a) of this provision.

"Veteran-owned small business concern" means a small business concern--

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern" means a small business concern--

(1) That is at least 51 percent owned by one or more women; or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(d) Notice. (1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.

(2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small, HUBZone small, small disadvantaged, or women- owned small business concern in order to obtain a contract to be awarded under the preference programs established pursuant to section 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall--

(i) Be punished by imposition of fine, imprisonment, or both;

(ii) Be subject to administrative remedies, including suspension and debarment; and

(iii) Be ineligible for participation in programs conducted under the authority of the Act.

7. SMALL DISADVANTAGED BUSINESS STATUS (FAR 52.219-22) (OCT 1999)

(a) General. This provision is used to assess an offeror's small disadvantaged business status for the purpose of obtaining a benefit on this solicitation. Status as a small business and status as a small disadvantaged business for general statistical purposes is covered by the provision at FAR 52.219-1, Small Business Program Representation.

(b) Representations. (1) General. The Offeror represents, as part of its offer, that it is a small business under the size standard applicable to this acquisition; and either--

[ ] (i) It has received certification by the Small Business Administration as a small disadvantaged business concern consistent with 13 CFR 124, Subpart B; and

(A) No material change in disadvantaged ownership and control has occurred since its certification;

(B) Where the concern is owned by one or more disadvantaged individuals, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(C) It is identified, on the date of its representation, as a certified small disadvantaged business concern in the database maintained by the Small Business Administration (PRO-Net); or

[ ] (ii) It has submitted a completed application to the Small Business Administration or a Private Certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR 124, Subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since its application was submitted.

(2) [ ] For Joint Ventures. The Offeror represents, as part of its offer, that it is a joint venture that complies with the requirements at 13 CFR 124.1002(f) and that the representation in paragraph (b)(1) of this provision is accurate for the small disadvantaged business concern that is participating in the joint venture. [The Offeror shall enter the name of the small disadvantaged business concern that is participating in the joint venture:\_\_\_\_\_.]

(c) Penalties and Remedies. Anyone who misrepresents any aspects of the disadvantaged status of a concern for the purposes of securing a contract or subcontract shall--

- (1) Be punished by imposition of a fine, imprisonment, or both;
- (2) Be subject to administrative remedies, including suspension and debarment; and
- (3) Be ineligible for participation in programs conducted under the authority of the Small Business Act.

8. PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FAR 52.222-22) (FEB 1999)

The Offeror represents that--

- (a) It [ ] has, [ ] has not participated in a previous contract or subcontract subject the Equal Opportunity clause of this solicitation;
- (b) It [ ] has, [ ] has not filed all required compliance reports; and
- (c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

9. AFFIRMATIVE ACTION COMPLIANCE (FAR 52.222-25) (APR 1984)

The Offeror represents that--

- (a) It [ ] has developed and has on file, [ ] has not developed and does not have on file, at each establishment, affirmative action programs required by the rules and regulations of the Secretary of Labor (41 CFR 60-1 and 60-2), or (b) It [ ] has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

10. COMPLIANCE WITH VETERANS' EMPLOYMENT REPORTING REQUIREMENTS (FAR 52.222-38) (DEC 2001)

By submission of its offer, the Offeror represents that, if it is subject to the reporting requirements of 38 U.S.C. 4212(d) (i.e., if it has any contract containing Federal Acquisition Regulation clause 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans), it has submitted the most recent VETS-100 Report required by that clause.

11. CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (52.223-13) (OCT 2000)

- (a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969, August 8, 1995.

(b) By signing this offer, the Offeror certifies that--

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the Offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: (Check each block that is applicable.)

[ ] (i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

[ ] (ii) The facility does not have 10 or more full time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

[ ] (iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

[ ] (iv) The facility does not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or

[ ] (v) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory of possession over which the United States has jurisdiction.

12. BUY AMERICAN ACT CERTIFICATE (FAR 52.225-2) (MAY 2002)

(a) The Offeror certifies that each end product, except those listed in paragraph (b) of this provision, is a domestic end product as defined in the clause of this solicitation entitled "Buy American Act--Supplies" and that the Offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The Offeror shall list as foreign end products those end products manufactured in the United States that do not qualify as domestic end products.

(b) Foreign End Products:

Line Item No.	Country of Origin
_____	_____
_____	_____
_____	_____

[List as necessary]

(c) The Government will evaluate offers in accordance with the policies and procedures of Part 25 of the Federal Acquisition Regulation.

13. HISTORICALLY BLACK COLLEGE OR UNIVERSITY AND MINORITY INSTITUTION REPRESENTATION (FAR 52.226-2) (MAY 2001)

(a) Definitions. As used in this provision--

"Historically black college or university" means an institution determined by the Secretary of Education to meet the requirements of 34 CFR 608.2. For the Department of Defense, the National Aeronautics and Space Administration, and the Coast Guard, the term also includes any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

"Minority institution" means an institution of higher education meeting the requirements of Section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1067k, including a Hispanic- serving institution of higher education, as defined in Section 316(b)(1) of the Act (20 U.S.C. 1101a)).

(b) Representation. The Offeror represents that it--

☐ is ☐ is not a historically black college or university;

☐ is ☐ is not a minority institution.

14. REPRESENTATION OF LIMITED RIGHTS DATA AND RESTRICTED COMPUTER SOFTWARE  
(FAR 52.227-15) (MAY 1999)

(a) This solicitation sets forth the work to be performed if a contract award results and the Government's known delivery requirements for data (as defined in FAR 27.401). Any resulting contract may also provide the Government the option to order additional data under the Additional Data Requirements clause at 52.227-16 of the FAR, if included in the contract. Any data delivered under the resulting contract will be subject to the Rights in Data-General clause at 52.227-14 that is to be included in this contract. Under the latter clause, a Contractor may withhold from delivery data that qualify as limited rights data or restricted computer software and deliver form, fit, and function data in lieu thereof. The latter clause also may be used with its Alternates II and/or III to obtain delivery of limited rights data or restricted computer software, marked with limited rights or restricted rights notices, as appropriate. In addition, use of Alternate V with this latter clause provides the Government the right to inspect such data at the Contractor's facility.

(b) As an aid in determining the Government's need to include Alternate II or Alternate III in the clause at 52.227-14, Rights in Data--General, the Offeror shall complete paragraph (c) of this provision to either state that none of the data qualify as limited rights data or restricted computer software, or identify, to the extent feasible, which of the data qualifies as limited rights data or restricted computer software. Any identification of limited rights data or restricted computer software in the Offeror's response is not determinative of the status of such data should a contract be awarded to the Offeror.

(c) The Offeror has reviewed the requirements for the delivery of data or software and states [offeror check appropriate block]--

☐ None of the data proposed for fulfilling such requirements qualifies as limited rights data or restricted computer software.

☐ Data proposed for fulfilling such requirements qualify as limited rights data or restricted computer software and are identified as follows:

---

---

---

Note: "Limited rights data" and "Restricted computer software" are defined in the contract clause entitled "Rights in Data- General."

15. COST ACCOUNTING STANDARDS NOTICES AND CERTIFICATION (FAR 52.230-1)  
(JUN 2000)

NOTE: This notice does not apply to small businesses or foreign governments. This notice is in three parts, identified by Roman numerals I through III.

Offerors shall examine each part and provide the requested information in order to determine Cost Accounting Standards (CAS) requirements applicable to any resultant contract.



If the Offeror is an educational institution, Part II does not apply unless the contemplated contract will be subject to full or modified CAS coverage pursuant to 48 CFR 9903.201-2(c)(5) or 9903.201-2(c)(6), respectively.

#### I. DISCLOSURE STATEMENT--COST ACCOUNTING PRACTICES AND CERTIFICATION

(a) Any contract in excess of \$500,000 resulting from this solicitation will be subject to the requirements of the Cost Accounting Standards Board (48 CFR Chapter 99), except for those contracts which are exempt as specified in 48 CFR 9903.201-1.

(b) Any offeror submitting a proposal which, if accepted, will result in a contract subject to the requirements of 48 CFR Chapter 99 must, as a condition of contracting, submit a Disclosure Statement as required by 48 CFR 9903.202. When required, the Disclosure Statement must be submitted as a part of the Offeror's proposal under this solicitation unless the Offeror has already submitted a Disclosure Statement disclosing the practices used in connection with the pricing of this proposal. If an applicable Disclosure Statement has already been submitted, the Offeror may satisfy the requirement for submission by providing the information requested in paragraph (c) of Part I of this provision.

Caution: In the absence of specific regulations or agreement, a practice disclosed in a Disclosure Statement shall not, by virtue of such disclosure, be deemed to be a proper, approved, or agreed-to practice for pricing proposals or accumulating and reporting contract performance cost data.

(c) Check the appropriate box below:

☐ (1) Certificate of Concurrent Submission of Disclosure Statement. The Offeror hereby certifies that, as a part of the offer, copies of the Disclosure Statement have been submitted as follows:

(i) Original and one copy to the cognizant Administrative Contracting Officer (ACO) or cognizant Federal agency official authorized to act in that capacity (Federal official), as applicable; and

(ii) One copy to the cognizant Federal auditor.

(Disclosure must be on Form No. CASB DS-1 or CASB DS-2, as applicable. Forms may be obtained from the cognizant ACO or Federal official and/or from the loose-leaf version of the Federal Acquisition Regulation.)

Date of Disclosure Statement: \_\_\_\_\_

Name and Address of Cognizant ACO or Federal Official Where Filed:

The Offeror further certifies that the practices used in estimating costs in pricing this proposal are consistent with the cost accounting practices disclosed in the Disclosure Statement.

☐ (2) Certificate of Previously Submitted Disclosure Statement. The Offeror hereby certifies that the required Disclosure Statement was filed as follows:

Date of Disclosure Statement: \_\_\_\_\_

Name and Address of Cognizant ACO or Federal Official Where Filed:

The Offeror further certifies that the practices used in estimating costs in pricing this proposal are consistent with the cost accounting practices disclosed in the applicable Disclosure Statement.

☐ (3) Certificate of Monetary Exemption. The Offeror hereby certifies that the Offeror, together with all divisions, subsidiaries, and affiliates under common control, did not receive net awards of negotiated

prime contracts and subcontracts subject to CAS totaling more than \$50 million (of which at least one award exceeded \$1 million) in the cost accounting period immediately preceding the period in which this proposal was submitted. The Offeror further certifies that if such status changes before an award resulting from this proposal, the Offeror will advise the Contracting Officer immediately.

☐ (4) Certificate of Interim Exemption. The Offeror hereby certifies that (i) the Offeror first exceeded the monetary exemption for disclosure, as defined in (3) of this subsection, in the cost accounting period immediately preceding the period in which this offer was submitted and (ii) in accordance with 48 CFR 9903.202-1, the Offeror is not yet required to submit a Disclosure Statement. The Offeror further certifies that if an award resulting from this proposal has not been made within 90 days after the end of that period, the Offeror will immediately submit a revised certificate to the Contracting Officer, in the form specified under subparagraph (c)(1) or (c)(2) of Part I of this provision, as appropriate, to verify submission of a completed Disclosure Statement.

Caution: Offerors currently required to disclose because they were awarded a CAS-covered prime contract or subcontract of \$50 million or more in the current cost accounting period may not claim this exemption (4). Further, the exemption applies only in connection with proposals submitted before expiration of the 90- day period following the cost accounting period in which the monetary exemption was exceeded.

## II. COST ACCOUNTING STANDARDS--ELIGIBILITY FOR MODIFIED CONTRACT COVERAGE

If the Offeror is eligible to use the modified provisions of 48 CFR 9903.201-2(b) and elects to do so, the Offeror shall indicate by checking the box below. Checking the box below shall mean that the resultant contract is subject to the Disclosure and Consistency of Cost Accounting Practices clause in lieu of the Cost Accounting Standards clause.

☐ The Offeror hereby claims an exemption from the Cost Accounting Standards clause under the provisions of 48 CFR 9903.201-2(b) and certifies that the Offeror is eligible for use of the Disclosure and Consistency of Cost Accounting Practices clause because during the cost accounting period immediately preceding the period in which this proposal was submitted, the Offeror received less than \$50 million in awards of CAS-covered prime contracts and subcontracts. The Offeror further certifies that if such status changes before an award resulting from this proposal, the Offeror will advise the Contracting Officer immediately.

Caution: An Offeror may not claim the above eligibility for modified contract coverage if this proposal is expected to result in the award of a CAS-covered contract of \$50 million or more or if, during its current cost accounting period, the Offeror has been awarded a single CAS-covered prime contract or subcontract of \$50 million or more.

## III. ADDITIONAL COST ACCOUNTING STANDARDS APPLICABLE TO EXISTING CONTRACTS

The Offeror shall indicate below whether award of the contemplated contract would, in accordance with subparagraph (a)(3) of the Cost Accounting Standards clause, require a change in established cost accounting practices affecting existing contracts and subcontracts.

☐ yes ☐ no

### 16. OFFEROR WAIVER OF PRICE EVALUATION ADJUSTMENT UNDER FAR CLAUSE 52.219-4 (LaRC 52.219-94) (JUN 2000)

Those HUB Zone small business concerns electing to waive the adjustment must check the box below, representing paragraph (c) of the clause.

☐ Offeror elects to waive the evaluation preference.

### 17. OFFEROR WAIVER OF PRICE EVALUATION ADJUSTMENT UNDER FAR

CLAUSE 52.219-23 (LaRC 52.219-95) (JUN 2000)

Those SDB concerns electing to waive the adjustment must check the box below, representing paragraph (c) of the clause.

[ ] Offeror elects to waive the adjustment.

**SECTION L - INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS****1. LISTING OF PROVISIONS INCORPORATED BY REFERENCE**

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

**I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)**

CLAUSE NUMBER	DATE	TITLE
52.204-6	JUN 1999	DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER
52.211-14	SEP 1990	NOTICE OF PRIORITY RATING FOR NATIONAL DEFENSE USE
		Insert "DO rated order" in blank.
52.214-34	APR 1991	SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE
52.214-35	APR 1991	SUBMISSION OF OFFERS IN U.S. CURRENCY
52.215-1	MAY 2001	INSTRUCTIONS TO OFFERORS - COMPETITIVE ACQUISITIONS
52.215-16	OCT 1997	FACILITIES CAPITAL COST OF MONEY
52.215-20	OCT 1997	REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA (ALT IV)
52.219-24	OCT 2000	SMALL DISADVANTAGED BUSINESS (SDB) PARTICIPATION PROGRAM--TARGETS
52.227-6	APR 1984	ROYALTY INFORMATION
52.232-38	MAY 1999	SUBMISSION OF ELECTRONIC FUNDS TRANSFER INFORMATION WITH OFFER

**II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) PROVISIONS**

CLAUSE NUMBER	DATE	TITLE
1852.223-73	APR 2002	SAFETY AND HEALTH PLAN
18-52.227-71	APR 1984	REQUESTS FOR WAIVER OF RIGHTS TO INVENTIONS
18-52.227-84	DEC 1989	PATENT RIGHTS CLAUSES
1852.228-80	SEP 2000	INSURANCE - IMMUNITY FROM TORT LIABILITY
1852.233-70	MAY 2002	PROTESTS TO NASA
1852.242-74	MAR 1999	NOTICE OF EARNED VALUE MANAGEMENT SYSTEM

**2. TYPE OF CONTRACT (FAR 52.216-1) (APR 1984)**

The Government contemplates award of a cost plus incentive fee contract resulting from this solicitation.

3. PREAWARD ON-SITE EQUAL OPPORTUNITY COMPLIANCE EVALUATION (FAR 52.222-24) (FEB 1999)

If a contract in the amount of \$10 million or more will result from this solicitation, the prospective Contractor and its known first-tier subcontractors with anticipated subcontracts of \$10 million or more shall be subject to a pre-award compliance evaluation by the Office of Federal Contract Compliance Programs (OFCCP), unless, within the preceding 24 months, OFCCP has conducted an evaluation and found the prospective Contractor and subcontractors to be in compliance with Executive Order 11246.

4. SERVICE OF PROTEST (FAR 52.233-2) (AUG 1996)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency. Copies of any protests that are filed with the General Accounting Office (GAO) shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgement of receipt from Brad Gardner; NASA, Langley Research Center; Mail Stop 126; Hampton, Virginia 23681-2199.

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

5. SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FAR 52.252-1) (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The Offeror is cautioned that the listed provisions may include blocks that must be completed by the Offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the Offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<http://www.arnet.gov/far/>

<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

6. AUTHORIZED DEVIATIONS IN PROVISIONS (FAR 52.252-5) (APR 1984)

(a) The use in this solicitation of any Federal Acquisition Regulation (48 CFR Chapter 1) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the provision.

(b) The use in this solicitation of any NASA FAR Supplement(48 CFR Chapter 18) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

7. PRE-PROPOSAL/PRE-BID CONFERENCE (NASA 1852.215-77) (DEC 1988)

A pre-proposal/pre-bid conference will be held as indicated below:

Date: March 6, 2003

Time: 9:00 a.m. to 12:00 p.m.

Location: ODU Peninsula Higher Education Center  
600 Butler Farm Rd.  
Hampton, VA

Attendance at the pre-proposal/pre-bid conference is recommended; however, attendance is neither required nor a prerequisite for proposal/bid submission and will not be considered in the evaluation. For planning your itinerary, the following is a tentative agenda for the conference.

Opening Remarks

LaRC Presentations  
Questions and Answers

Attendance will be limited to a maximum of three representatives per company. The briefing will be unclassified. Please contact Brad Gardner at [r.b.gardner@larc.nasa.gov](mailto:r.b.gardner@larc.nasa.gov) to register for the conference.

In order that as many questions as possible may be answered at the conference, written questions must be submitted to Brad Gardner at [r.b.gardner@larc.nasa.gov](mailto:r.b.gardner@larc.nasa.gov) no later than March 3, 2003. A limited time may be available for answering questions submitted on the day of the conference; however, there is no assurance that adequate time to answer such questions will remain. After the briefing, please advise this Center if your firm intends to submit a proposal.

8. DETERMINATION OF FINANCIAL RESPONSIBILITY

The successful offeror may be required to demonstrate its responsibility for award and/or, if appropriate, the responsibility of its proposed subcontractors. Accordingly, offerors are hereby advised that if it is the selected offeror it may be requested to provide additional information pertaining to its (and its subcontractor(s)) financial resources after notification of selection for negotiation/award. (See FAR 9.104- 1.)

9. PROPOSAL PAGE LIMITATIONS (NFS 1852.215-81) (FEB 1998)

(a) The following page limitations are established for each portion of the proposal submitted in response to this solicitation.

<u>Proposal Section</u>	<u>Page Limit</u>
Technical Proposal, Volume I	75 pages
Business Proposal, Volume II	Unlimited (all pages must be numbered)
Past Performance Proposal, Volume III	Unlimited

(b) A page is defined as one side of a sheet, 8 1/2" x 11", with at least one inch margins on all sides, using not smaller than 12 point type. Foldouts count as an equivalent number of 8 1/2" x 11" pages. The metric standard format most closely approximating the described standard 8 1/2" x 11" size may also be used.

(c) Title pages and tables of contents are excluded from the page counts specified in paragraph (a) of this provision. In addition, the Cost section of your proposal is not page limited. However, this section is to be strictly limited to cost and price information. Information that can be construed as belonging in one of the other sections of the proposal will be so construed and counted against that section's page limitation.

(d) If final revisions are requested, separate page limitations will be specified in the Government's request for that submission.

(e) Pages submitted in excess of the limitations specified in this provision will not be evaluated by the Government and will be returned to the Offeror.

10. SMALL DISADVANTAGED BUSINESS (SDB) PARTICIPATION TARGET AND SMALL BUSINESS (SB) SUBCONTRACTING GOAL

It is the policy of the United States Government to provide the maximum practicable opportunity for SB, HUBZone SB, SDB, and women-owned SB concerns to participate in performing its contracts. Such concerns shall also have the maximum practicable opportunity to participate as subcontractors in Government contracts, consistent with efficient contract performance. Additionally, NASA has a statutory goal to make available to SDB concerns, Historically Black Colleges and Universities, minority institutions, and women-owned SB concerns at least 8 percent of NASA's procurement dollars (see Section I NFS Clause 1852.219-76). The Government has also established mechanisms to incentivize, at the prime and

subcontract level, the participation of SDB concerns in the Department of Commerce NAICS Industry Subsectors as authorized by the Department of Commerce.

In keeping with the Government and Agency policy goals, the source evaluation factors in Section M of the solicitation include consideration of the planned participation of SB concerns.

Section I FAR Clause 52.219-9 of this solicitation also requires each large business offeror to submit with its proposal a Small Business Subcontracting Plan. (The Subcontracting Plan is not required to be submitted by SB offerors.) The Government has determined that a reasonable goal for this procurement for subcontracting to SB concerns overall is 11% of the contract price inclusive of 5% to SDB's, 2% to Women-Owned small businesses, and 1% to veteran-owned small businesses. The Subcontracting Plan will be evaluated under Mission suitability Subfactor 2.

The Government will separately evaluate the participation, at the prime and subcontract level, of SDB concerns in the Department of Commerce NAICS Industry Subsectors as authorized by the Department of Commerce. In accordance with FAR 19.1202, this solicitation contains an applicable source selection subfactor.

The Contractor shall make an independent assessment of SDB participation and SB subcontracting opportunities to attain or exceed the subcontracting goals indicated above, and to achieve the maximum practicable SDB participation target for this procurement.

The solicitation also includes a Price Evaluation Adjustment for SDB concerns in accordance with FAR 19.11 (see Section I FAR Clause 52.219-23) and for HUBZone Small Businesses (See Section I FAR Clause 52.219-4).

## 11. PROPOSAL PREPARATION AND SUBMISSION--SPECIAL INSTRUCTIONS

### A. General Information

1. Number of Proposals, Time and Place of Submission -- The Offeror shall submit the original and 10 copies of each volume of its proposal to the address shown in Block 8 of the Standard Form (SF) 33 (face page of this solicitation), or if hand carried, to the depository listed in Block 9 of the SF 33. Offers must be received at the place indicated on or before the date and hour shown in Block 9 of the SF 33.

2. Proposal Clarity -- The Offeror's proposal should be specific, complete, and concise. The Offeror is urged to examine this solicitation in its entirety and to assure that its proposal contains all the necessary information, provides all required documentation, and is complete in all respects since evaluation of the proposal will be based on the actual material presented and not on the basis of what is implied. The Offeror should ensure that the cost proposal is consistent with the technical proposal in all respects since the cost proposal may be used as an aid to determine the Offeror's understanding of the technical requirements. Discrepancies may be viewed as a lack of understanding.

3. Proposals must be submitted in three (3) volumes: Volume I, Technical Proposal, Volume II, Business Proposal and Volume III, Past Performance Proposal. No cost information shall be presented in the Technical Proposal.

4. The 75 page limitation stated in NFS 1852.215-81 is exclusive of the cover page, table of contents, title pages, list of figures, quality system manual, quality system procedures, quality plan, compliance plan, Small Business Subcontracting Plan and dividers. The Business Proposal (Volume II) is not page limited. However, the Business Proposal is to be strictly limited to responses to Factors 2 and the executed Section K, Representations, Certifications, and Other Statements of Offerors. All pages must be numbered. Past Performance information (Volume III) is not page limited but is strictly limited to responses to Factor 3.

6. Early Submission of Past Performance Information - Volume III, Factor 3 – Past Performance. It is requested that all information regarding Past Performance including Form PP as defined below be submitted to NASA at the location defined in Block 9 of the attached SF 33 no later than 4:00 p.m. Eastern Standard Time **two weeks prior (including weekends and holidays)** to the final proposal due date. Proposals will not be considered late if this deadline is not met.

7. Each volume should be specific and complete. Each volume should include the detailed information outlined below in order that it can be evaluated in accordance with the evaluation factors set forth in Section M of this solicitation. The Offeror should structure each volume to adhere to the Factor headings listed below:

B. TECHNICAL PROPOSAL - VOLUME I

FACTOR 1 - MISSION SUITABILITY

The Offeror shall identify and discuss relevant programmatic risk areas associated with each Mission Suitability subfactor and approach for managing these risks. Programmatic risks include, but are not limited to, technical, schedule, cost, safety, occupational health, security (including personnel, information technology, and facilities/property) and the risk of unauthorized technology transfer (see NPG 2190, NASA Export Control Program), and environmental considerations. The analysis conducted should address the probability of success, the impact of failure, and the alternatives available to meet the solicitation requirements.

1. Subfactor 1 - Understanding the Requirement and Technical Approach

The Offeror should address its understanding and approach for the final design, fabrication, integration, and flight test support of the X-43C Hypersonic Demonstrator Vehicles and Adapters. The proposal should demonstrate the Offeror's understanding by discussion of problems likely to be encountered and proposed resolution thereof. Innovative ideas that may be applied should be addressed.

The Offeror should provide more depth in addressing the following:

- hypersonic propulsion system design, development, and verification
- propulsion-airframe integration
- critical aerodynamic considerations
- aero-heating environment testing
- flight vehicle integration and testing
- flight guidance and control methodology and implementation
- design and manufacturing challenges and solution approaches
- modeling and simulation requirements for integrated system performance analysis, including:
  - modeling development plan and approach
  - modeling verification plan and approach
  - modeling uncertainty quantification and analysis plan and approach
- approaches used to enhance the probability of mission success, including:
  - electronic parts
  - redundancy
  - spares
  - reliability

2. Subfactor 2 – Management and Operations

The Offeror's response to this subfactor should address the following areas.

--Roles, responsibilities, and work functions that the Offeror expects to obtain through joint ventures, teaming, subcontracting, and/or consulting agreements

--Detailed information on the Offeror's processes for insuring effective and efficient coordination and communication with the Government in areas such as design, development, testing, reviews, in-process inspections/tests, and handling of ITAR and classified data.

--The adequacy/availability of the manufacturing and test facilities proposed to perform the contract should be described.

--Approach to Meeting the 11% Small Business Goal: Each large business offeror shall submit its Small Business Subcontracting Plan for insuring the maximum practicable participation of Small Business concerns in the performance of this contract, as required by Section I clauses FAR 52.219-8 and 52.219-9. This plan shall comply with the Section I FAR Clause 52.219-9. The plan should include the identification of specific small businesses which will perform work on the contract, if known; the extent of commitment to use small business concerns; and the types and amount of work to be performed by small businesses. The Government has determined that a reasonable goal for this procurement for subcontracting to SB concerns overall is 11% of the contract price inclusive of 5% to SDB's, 2% to Women-Owned small businesses, and 1% to veteran-owned small businesses. (Note that while the Plan required by FAR 52.219-9 requires goals to be expressed as a percentage of total planned subcontracting dollars, the Government will evaluate the proposed goals as a percentage of the proposed contract price.)

--ISO 9001 Compliance: The Offeror should submit the following information to demonstrate the effectiveness of its quality system.

-Offerors which are ISO 9001 compliant (as defined in Section H) at the proposal due date shall provide a copy of their Quality System Manual. Such offerors should also provide their quality system procedures that as a minimum address: (a) contract and subcontract management, (b) customer requirement review and execution, (c) task management, including work order generation and processing, (d) document control, (e) handling of customer supplied product, (f) corrective, preventative and continuing improvement action systems, (g) training of employees, (h) customer satisfaction/performance measurement and (i) design control. Those offerors which submit these documents demonstrating an effective quality system have the potential to be given the most favorable treatment possible under this evaluation element.

-All offerors shall submit a Quality Plan. The Quality Plan should describe how the Offeror will develop quality system documentation or modify existing quality system documentation needed to ensure effective planning, operation and control of processes/work activities specific to this contract. The document should describe how the integrity of the Quality Management System (QMS) is maintained when changes to the QMS are planned and implemented.

-Offerors which are not compliant at the date the proposals are due should submit a letter from an appropriate company official expressing its commitment to become compliant within nine months of the effective contract date, in accordance with H.11. The Offeror should also submit a compliance plan for becoming ISO 9001 compliant.

-Definitions:

Quality System Manual – A manual specifying the quality management system of an organization.

Quality System Procedures – Written procedures documenting 'how business is done' within an organization's quality management system.

Quality Plan – A document specifying which procedures and associated resources shall be applied by whom and when to a specific project, product or process in order to accomplish the contractual requirements.

Compliance Plan – A comprehensive plan for achieving compliance to the current ISO 9001 standard.

3. Subfactor 3 - Small Disadvantaged Business (SDB) Participation (in the NAICS Industry Subsectors as Determined by the Department of Commerce)



The Offeror should submit its plan for insuring the maximum practicable participation of SDB firms in the NAICS Industry Subsectors as determined by the Department of Commerce in the performance of this contract.

The Offeror should provide targets expressed as dollars and percentages of total contract value. A total target for SDB participation by the Contractor, including joint venture partners and team members, and a total target for SDB participation by subcontractors shall be specified. If the Offeror is an SDB that has waived the SDB price evaluation adjustment at 52.219-23, it shall provide with its offer a target for the work that it intends to perform in the NAICS Industry Subsectors as the prime contractor. Any targets will be incorporated into and become part of any resulting contract (See H-9).

The Offeror should describe its approach and methods for insuring SDB participation. The proposal shall include identification of specific SDBs that will perform work on the contract if known; the extent of commitment to use SDB concerns; and the types and amount of work to be performed by SDBs.

4. Subfactor 4 - Safety and Health

The Offeror should comprehensively identify potential safety and health risks and plans for mitigating such risks. In addition, the Offeror should provide a safety and health plan in accordance with NFS Provision 1852.223-73, Safety and Health Plan. The approach for complying with all applicable NASA policies and procedures relative to safety, occupational health, NASA Policy Guide (NPG) 8715.1 "NASA Safety and Health Handbook, Occupational Safety and Health Programs," and NPG 8715.3 "NASA Safety Manual" should be discussed.

C. BUSINESS PROPOSAL - VOLUME II

FACTOR 2 - COST

Under requirements of the Federal Acquisition Regulation (FAR), the Contracting Officer is responsible for determining reasonableness of prices. It is expected that adequate price competition will be obtained under this solicitation and that a determination of price reasonableness will be made in accordance with FAR 15.403-3. However, to establish cost realism, and the extent to which prices reflect performance addressed in the Technical Proposal, each Offeror is required to submit cost or pricing information with its proposal pursuant to FAR 52.215-20, Alternate IV. The Offeror's technical and cost proposals must correlate and support each other fully.

a. The Offeror shall fully comply with the requirements set forth in FAR 15.408, Table 15-2, I. General Instructions A, E, G, and II. Include in the cost proposal sufficient detail to support and explain all costs proposed, giving figures and narrative explanation. Since an award may be made without further discussion, this information must be submitted with an Offeror's proposal.

b. The cost proposal should be prepared in a manner consistent with your current accounting system. Provide a statement verifying that you have an approved Accounting System, including the approval date and the name of the reviewing office. List any other systems, such as estimating, purchasing, billing, compensation, and budgeting, that have been reviewed or are under review, showing the status, outstanding issues, approval date, and name of the reviewing office. Identify your responsible Defense Contract Audit Agency (DCAA) Office. If applicable, provide a copy of your most current Forward Pricing Rate Agreement, a statement on the status of your Cost Accounting Standards Disclosure Statement and that your proposal was proposed in accordance with that Disclosure Statement, and the status of any unresolved Cost Accounting Standard issues.

c. Each subcontract expected to exceed a total of \$1,000,000 shall also be supported in a similar manner consistent with all cost/pricing instructions of the solicitation (Paragraph 11, C. BUSINESS PROPOSAL – VOLUME II, FACTOR 2 – COST). Prospective subcontractors may submit proprietary cost data directly to the Government no later than the date and time specified in the instructions for receipt of offers for this RFP.

d. Complete the Cost Forms included as Attachment 3 to this solicitation. Identify, explain, and reconcile any differences between Cost Form information and/or rates and that in the your established accounting system. For example, if contract years cross your fiscal years, show how fiscal year rates were apportioned to establish contract year rates. This establishes an audit trail from the Cost Forms to the Offeror's books and records.

e. Computerized Cost Proposal Input Instructions

(1) The Government intends to use personal computers with Windows 2000 Professional software to aid in the evaluation of the cost proposal. The Offeror and subcontractor(s) shall submit cost information and Cost Forms electronically or on 3-1/2 inch diskettes or CD's, two copies, in a format that can be opened with the specified software. **Offerors shall virus scan all diskettes/CDs prior to submission.**

Computerized cost information must be the identical data/information and format as that submitted in the paper proposal. In the event of any inconsistency between the computerized submission and the paper proposal, the paper proposal will be considered the intended version. Any questions related to the computerized cost proposal shall be directed to Sherry Harper at (757) 864-2474.

(2) Each diskette or CD submitted must have an external label attached to it marked with the Offeror's name and the solicitation number. It is preferred that all data/information be provided under one file; however, if the information you are submitting requires more than one file, save all files under one directory and no two files or folders shall have the same file name. All linking must be within that directory. There shall be no external links. External links shall be considered as unsupported information. The Offeror's cost files/directory name must begin with at least the first four letters of the company's name or normal abbreviation, for example, Always Be Careful, Inc. cost file would be Always.xlw or ABCI.xlw.

**ALL ELECTRONIC COST SUBMISSIONS SHALL BE FORMULA-DRIVEN SELF-CALCULATING SPREADSHEETS. ALL "ABSOLUTE VALUES" MUST BE EXPLAINED AND SUPPORTED. ANY VALUE PROPOSED WITHOUT A REALISTIC FORMULA WITH TRACEABLE ELEMENTS AND/OR A WRITTEN EXPLANATION SHALL BE CONSIDERED AS UNSUPPORTED.**

f. Other Price and Cost Detail Instructions

(1) The sixty-six (66) month proposed cost shall be based on the requirements of the SOW and the information set forth below. Assume a contract start date of August 1, 2003. All cost and pricing information should be detailed by Government fiscal year and in accordance with their approved accounting system.

(2) Labor – The Offeror must propose the direct labor hours and skill mix necessary for the requirements set forth in the SOW. The Offeror's proposal must show the hours and costs by labor classification/category; however, the resultant contract will not reflect a specified level-of-effort. Any composite hourly rates must be explained. The "direct labor hours" discussed in these instructions are defined as those productive hours expended by Contractor and/or subcontractor personnel in performing direct functions required to perform the SOW. Identify any of the positions you propose to subcontract. It does not include administrative or other labor classified as indirect by your established accounting policy and procedures. It does not include contract support labor, i.e. the administrative effort supporting the overall contract and classified as direct by your accounting system. The term does not include sick leave, vacation, holiday leave, military leave, or any type of administrative leave, but does include overtime hours and direct labor hours provided under subcontracts.

(3) Indirects - For each indirect pool, identify the rates and bases used to determine the proposed costs. Clearly state whether this contract has been considered in determining your proposed indirect rates. Provide the name of responsible DCAA Office and point of contact who performed the most recent audit of your indirect rates. If your indirect rates have not been recently reviewed by the responsible DCAA Office, explain why.

(4) Other Direct Costs (ODC) – Provide an itemized breakdown and detailed explanation of ODC costs proposed for this effort. You are reminded that the Contractor is responsible for providing all travel and materials necessary to perform the requirement in the SOW.

(5) ISO 9001:2000 – If there are any costs for becoming ISO 9001:2000 compliant included in your proposal, specify where.

(6) Facilities Capital Cost of Money (FCCOM) - Clearly identify FCCOM if you choose to include it in your proposal (ref. FAR 52.215-16). If you do not propose FCCOM, Clause 52.215-17, Waiver of Facilities Capital Cost of Money (Oct 1997) will be included in the contract. As required by NASA FAR Supplement 1815.404-471-5(a), when facilities capital cost of money is included as an item of cost in the Contractor's proposal, a reduction in the profit objective will be made in an amount equal to the amount of FCCOM allowed in accordance with FAR 31.205-10(a) or 1 percent of the cost base, whichever is less.

Escalation – As your cost proposal is expected to reflect the total cost to the Government for you to provide the effort in the statement of work of this solicitation, your proposal should include anticipated escalation. Escalation factors should be clearly stated and escalated amounts shown for each escalated item. Discuss the derivation and provide the rationale for your proposed escalation. Discuss your rationale for not escalating any elements that would normally be escalated.

(7) Incentive Fee – Specify the amounts proposed for fee. Provide your rationale. Clearly show how FCCOM was considered in the calculation of the proposed fee. Provide all information necessary to address the Exhibit D, Incentive Fee Plan. Also propose share ratios for both overruns and underruns.

#### D. PAST PERFORMANCE – Volume III

##### Factor 3 – Past Performance

A. Background - Past performance is one indicator of an offeror's ability to perform successfully. Therefore, this factor will assess each offeror's record (including the record of significant, over \$500,000, subcontractors and/or teaming partners) of performing services or delivering products that are similar in size, content, and complexity to the requirements of this solicitation. This assessment of past performance will provide an indicator to the Government of each offeror's likelihood for success on work arising from the current solicitation.

B. Content Guidelines - The information provided in the proposal shall contain overall corporate or offeror past performance, but not the past performance of individuals who are proposed to be involved in the required work. However, for newly formed businesses having little or no experience as the new business entity, the past performance of a predecessor business entity or the past performance of the company's principal owner(s) or corporate officer(s) shall be submitted. Newly formed business entities submitting such information shall also submit a thorough and clear explanation of why such information should be considered predictive of the offeror's performance under a contract resulting from this solicitation.

C. Proposal Content - The offeror shall include in its proposal a list of contracts that it, as well as any significant subcontractors or teaming partners, has held within the past three years for requirements that are similar in size, content, and complexity to the requirements of this solicitation. For each contract identified, the offeror shall include:

1. Contract Number
2. Contracting Agency
3. Points of contact in the program and contracting offices, including accurate telephone numbers
4. Contract type

5. Contract beginning and ending dates
6. Original cost/price and delivery terms, as well as actual cost/price and delivery
7. Base, fixed, incentive and award fee available, if applicable. Incentive and award fee actually earned (by contract year), if applicable
8. Brief contract description
9. The extent to which contract objectives were met, including (select, as appropriate)
  - a. Technical
  - b. Schedule
  - c. Cost
  - d. Management
  - e. Occupational health
  - f. Safety
  - g. Security
  - h. Overall mission success (identify problems in delivered hardware and software that resulted in delays or failures)
  - i. Subcontracting goals (achievement of all goals, with emphasis on record of meeting small disadvantaged business subcontracting goals, as well as monetary targets for small disadvantaged business participation)

The offeror shall also include with its proposal a list of the firms that will submit past performance questionnaires (see paragraph D. below), along with the written consent of its proposed subcontractors to allow the Government to discuss the subcontractors' past performance with the offeror.

D. Past Performance Questionnaires - Each offeror, as well as each significant subcontractor or teaming partner, shall select three customers for whom it has performed services or delivered products in the last three years that are similar in size, content, and complexity to the requirements of this solicitation. The offeror shall provide each of these customers a Past Performance Questionnaire (Attachment 1 to this solicitation) for completion and submission to the Contract Specialist for this solicitation. The selected customers should return or fax this questionnaire within the timeframe specified in this solicitation to the address or fax number provided. The information submitted may be verified by the Government through discussions with the references provided.

E. Independent Past Performance Information - Other references, aside from those provided by the offeror, may be contacted and their comments considered during the source selection process. While the Government may elect to consider data obtained from other sources, the burden of providing relevant references that the Government can readily contact rests with the offeror.

## **SECTION M - EVALUATION FACTORS FOR AWARD TO OFFERORS**

### **1. LISTING OF PROVISIONS INCORPORATED BY REFERENCE**

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
------------------	------	-------

None included by reference.

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) PROVISIONS

CLAUSE NUMBER	DATE	TITLE
------------------	------	-------

None included by reference.

2. METHOD OF EVALUATION

A. Proposals received in response to this RFP will be evaluated by a NASA Source Evaluation Board (SEB) in accordance with NFS 1815.3. Mission Suitability will be scored. Cost and Past Performance will not be scored. The Source Selection Official, after consultation with the SEB and other advisors, will select for contract award the Offeror which he considers able to perform the contract in a manner most advantageous to the Government, all factors considered.

B. Evaluation will be on the basis of material presented and substantiated in the Offeror's proposal and not on the basis of what may be implied. Vague statements will be interpreted as a lack of understanding on the part of the Offeror and/or inability to demonstrate adequate qualifications. The Offeror's attention is directed to Section L, 11., which provides important instructions concerning proposal preparation.

3. EVALUATION FACTORS

A. Factor 1 - Mission Suitability -- The content of this section of the Offeror's proposal will provide the basis for evaluation of the Offeror's response to the technical requirements of the RFP. Note: Proposal risks associated with technical aspects of the proposal will be assessed. The evaluation of risk will consider the probability of success, the impact of failure, and the alternatives available to meet the requirements.

The Mission Suitability subfactors to be considered and scored in the evaluation of the Offeror's Technical Proposal are set forth below:

1. Subfactor 1 - Understanding the Requirement and Technical Approach

The Offeror will be evaluated on its understanding and approach for the final design, fabrication, integration, verification, and flight test support of the X-43C Hypersonic Demonstrator Vehicles and Adapters. The evaluation will consider the Offeror's understanding through its discussion of problems likely to be encountered and proposed resolution thereof. Innovative ideas that may be applied will also be evaluated.

The Offeror should provide more depth in addressing the following:

- hypersonic propulsion system design, development, and verification
- propulsion-airframe integration
- critical aerodynamic considerations
- aero-heating environment testing
- flight vehicle integration and testing
- flight guidance and control methodology and implementation
- design and manufacturing challenges and solution approaches
- modeling and simulation requirements for integrated system performance analysis, including:

- modeling development plan and approach
- modeling verification plan and approach
- modeling uncertainty quantification and analysis plan and approach
- approaches used to enhance the probability of mission success, including:
  - electronic parts
  - redundancy
  - spares
  - reliability

2. Subfactor 2 – Management and Operations

The Offerors will be evaluated on their response to the following:

--Roles, responsibilities, and work functions which the Offeror expects to obtain through joint ventures, teaming, subcontracting and/or consulting agreements should be described and explained.

--Offeror's processes for insuring effective and efficient coordination and communication with the Government in areas such as design, development, testing, reviews, in-process inspections/tests, and handling of ITAR and classified data.

--The adequacy/availability of the manufacturing and test facilities proposed to perform the contract.

--Approach to Meeting the 11% Small Business Goal: The Government will evaluate the adequacy of the Small Business Subcontracting Plan. The offeror's small disadvantaged business, women-owned small business, veteran-owned small business, and overall small business subcontracting goals will be evaluated in comparison with the goals of 5%, 2%, 1% and 11% respectively. The proposed approach to meeting these goals; the extent to which the offeror has identified specific small business concerns; the extent of commitment to use small business concerns (i.e., enforceable commitments are to be weighted more heavily than non-enforceable ones); types and amount of work to be performed by small business concerns; and the realism of the subcontracting plan will be evaluated. (Note that while the Plan required by FAR 52.219-9 requires goals to be expressed as a percentage of total planned subcontracting dollars, the Government will evaluate the proposed goals as a percentage of the proposed contract price. This paragraph does not apply to Small Business offerors.)

--The effectiveness of the Offeror's quality system. For those offerors which are ISO 9001 compliant at the proposal due date, the Offeror's Quality System Manual will be evaluated to establish that the Offeror has an operational system, which will be utilized to ensure that product delivered or services provided meet LaRC specified requirements. The Offeror's quality system procedures will be evaluated for soundness and completeness and to establish that the Offeror has adequately addressed all applicable ANSI/ISO/ASQC Q9001 requirements. The Quality Plan of all offerors will be evaluated regarding effective planning, operation and control of processes/work activities specific to this contract. In addition, the plan for maintaining integrity of the QMS when changes are planned and implemented will be evaluated.

--For those offerors that are not ISO 9001 compliant at the date the proposals are due, the Government will evaluate the Offeror's expressed corporate commitment to become compliant and their documented compliance plan to ensure a comprehensive approach to achieving compliance within the 9 months required by the contract and their Quality Plan.

3. Subfactor 3 - Small Disadvantaged Business (SDB) Participation (in the NAICS Industry Subsectors as Determined by the Department of Commerce)

The extent of participation of SDB concerns in the NAICS Industry Subsectors as authorized by the Department of Commerce will be evaluated. The extent to which the offeror has identified specific SDB's; the extent of commitment to use SDB concerns (i.e., enforceable commitments are to be weighted more

heavily than non-enforceable ones); types, amount, complexity, and variety of work to be performed by SDB's; and realism of the proposal will be evaluated.

4. Subfactor 4 - Safety and Health

This subfactor will be used to evaluate the offeror's understanding of potential safety and health risks and plans for mitigating such risks. In addition, the offeror's proposed Safety and Health plan will be evaluated for compliance with Federal and State statutory and regulatory requirements, as well as compliance with applicable NASA Agency-wide and Installation specific policies and procedures.

B. Factor 2 - Cost - An analysis of the proposed price will be conducted to determine its reasonableness, acceptability and extent to which it reflects performance addressed in the technical proposal. In addition, an analysis of the proposed cost elements will be performed to assess cost realism and the Offeror's capability to accomplish the contract objectives within the cost proposed. Proposals that include unrealistically low labor rates, or that do not otherwise demonstrate cost realism, will be considered in a risk assessment and will be evaluated for award in accordance with that assessment. A probable cost will be developed for purposes of determining best value. The reasonableness of the proposed fee will be assessed in accordance with FAR 15.404-4. A price evaluation adjustment factor of ten (10) percent for small disadvantaged business concerns may be applied if the requirements of FAR 52.219-23 are met. The cost/price proposal may be used as an aid to determine the Offeror's understanding of the Statement of Work Requirements.

C. Factor 3 - Past Performance -- The Past Performance factor will evaluate each offeror's record (including the record of any significant subcontractors and/or teaming partners) of performing services or delivering products that are similar in size, content, and complexity to the requirements of this solicitation. The rating assigned to Past Performance will reflect consideration of information contained in the proposal, past performance evaluation input provided through customer questionnaires, and other references, if any, that the Government may contact for additional past performance information. Offerors without a record of relevant past performance, or for whom information on past performance is not available, shall receive a neutral rating. Offerors are cautioned that omissions or an inaccurate or inadequate response to this evaluation factor will have a negative effect on the overall evaluation.

Past Performance Ratings - The ratings set forth below will be used to evaluate the Past Performance factor for each offeror.

Each of the adjective ratings below has a "performance" component and a "relevance" component. The offeror must meet the requirements of both components to achieve a particular rating. In assessing relevance, the Government will consider the degree of similarity in size, content, and complexity to the requirements in this solicitation, as well as how current the past performance is.

In assessing performance, the Government will make an assessment of the offeror's overall performance record. The Government will evaluate the offeror's past performance record for meeting technical, schedule, cost, management, occupational health, safety, security, mission success, subcontracting goals, and other contract requirements. Isolated or infrequent problems that were not severe or persistent, and for which the offeror took immediate and appropriate corrective action, may not reduce the offeror's rating. On the other hand, ratings will be reduced when problems were within the contractor's control and were significant, persistent, or frequent, or when there is a pattern of problems or a negative trend of performance.

Excellent - Of exceptional merit; exemplary performance in a timely, efficient, and economical manner; very minor (if any) deficiencies with no adverse effect on overall performance; and experience that is highly relevant to this procurement.

Very good - Very effective performance; fully responsive to contract requirements; contract requirements accomplished in a timely, efficient, and economical manner for the most part; only minor deficiencies; and experience is very relevant to this procurement.

Good - Effective performance; fully responsive to contract requirements; reportable deficiencies, but with little identifiable effect on overall performance; and experience is relevant to this procurement.

Satisfactory - Meets or slightly exceeds minimum acceptable standards; adequate results; reportable deficiencies with identifiable, but not substantial, effects on overall performance; and experience is at least somewhat relevant to this procurement.

Poor/Unsatisfactory - Does not meet minimum acceptable standards in one or more areas; remedial action required in one or more areas; deficiencies in one or more areas which adversely affect overall performance.

Neutral - No record of relevant past performance or past performance information is not available

#### 4. RELATIVE IMPORTANCE OF EVALUATION FACTORS

A. The weights to be used in the scoring of the Mission Suitability Subfactors are presented below:

Subfactors	Weights
1. Understanding the Requirement and Approach	600
2. Management and Operations	300
3. Small Disadvantaged Business (SDB) Participation	50
4. Safety and Health	50

Note: The numerical weights assigned to the above subfactors are indicative of the relative importance of those evaluation areas. The weights will be utilized only as a guide.

B. Overall, in the selection of a Contractor for contract award, Mission Suitability, Cost, and Past Performance will be of essentially equal importance. All evaluation factors other than Cost, when combined, are significantly more important than Cost.

#### C. Adjustment for Cost Realism

A pool of 300 points will be used to adjust the Mission Suitability score to account for any weaknesses associated with the lack of cost realism present in the Offeror's proposal. This adjustment will be made if the proposed resources are unrealistically high or low according to the following guidelines:

Cost Realism Adjustment	Point Adjustment
+/- 30 percent	0
+/-31 to 40 percent	-50
+/-41 to 50 percent	-100
+/-51 to 60 percent	-150
+/-61 to 70 percent	-200
+/- more than 70 percent	-300



## ATTACHMENT 1

### PAST PERFORMANCE QUESTIONNAIRE

Send the completed form directly to the address or fax number listed at the bottom of page 2.

**DESCRIPTION – X-43C Hypersonic Demonstrator Vehicles**--This contract will require the final design, fabrication and delivery of three (3) hypersonic vehicles for flight demonstration of a hydrocarbon-fueled scramjet propulsion system between Mach 5 and Mach 7. The demonstration will include several minutes of accelerating flight, propulsion mode transition from subsonic to supersonic combustion and a fuel-cooled, flight-weight propulsion structure.

1. Section I through III, provides for contractually related descriptive information and identification of the evaluator.

The following definitions are offered for your use in completing Section IV.

Excellent - Of exceptional merit; exemplary performance in a timely, efficient, and economical manner; very minor (if any) deficiencies with no adverse effect on overall performance; and experience that is highly relevant to this procurement.

Very good - Very effective performance; fully responsive to contract requirements; contract requirements accomplished in a timely, efficient, and economical manner for the most part; only minor deficiencies; and experience is very relevant to this procurement.

Good - Effective performance; fully responsive to contract requirements; reportable deficiencies, but with little identifiable effect on overall performance; and experience is relevant to this procurement.

Satisfactory - Meets or slightly exceeds minimum acceptable standards; adequate results; reportable deficiencies with identifiable, but not substantial, effects on overall performance; and experience is at least somewhat relevant to this procurement.

Poor/Unsatisfactory - Does not meet minimum acceptable standards in one or more areas; remedial action required in one or more areas; deficiencies in one or more areas which adversely affect overall performance.

Neutral - No record of relevant past performance or past performance information is not available

Section V requests your comments in areas of contract performance with space at the end for comments relevant to other sections of the PAST PERFORMANCE QUESTIONNAIRE.

I. CONTRACT INFORMATION:

A. Name of Company Being Evaluated:		
B. Address:		
C. Contract Number:	D. Contract Type:	E. Contract Value:
F. Period of Performance:		

II. DESCRIPTION OF CONTRACT:

---



---



---

During the contract performance being evaluated this firm was the ☐ Prime Contractor; ☐ Significant Subcontractor; ☐ Team Member; ☐ Other (Describe)

---



---

Does anything other than a customer/supplier relationship exist between the firm being evaluated and your organization? If yes, please describe the nature of this relationship: ☐ No ☐ Yes

---

III. EVALUATOR:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone No.: \_\_\_\_\_ Fax No.: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

---

**SEND TO:** ATTN: **126/Brad Gardner**  
 NASA LANGLEY RESEARCH CENTER  
 HAMPTON, VA 23681-2199  
 TELEPHONE: (757) 864-2525 FAX: (757) 864-7898  
 E-mail: r.b.gardner@larc.nasa.gov

This form contains Source Selection Information when completed. See FAR 3.104

## IV. Please rate the Contractor's Experience and Performance

## A. Please rate the Contractor's general Technical experience/performance in the following areas:

1. Meeting contract requirements	E	VG	G	S	P	N
2. Qualifications of technical staff	E	VG	G	S	P	N
3. Timeliness	E	VG	G	S	P	N
4. Completeness and accuracy	E	VG	G	S	P	N
5. Innovativeness	E	VG	G	S	P	N
6. Documentation	E	VG	G	S	P	N
7. Reviews/Quality Assurance/Safety	E	VG	G	S	P	N
8. Responsiveness to changing requirements	E	VG	G	S	P	N
9. Cooperation/flexibility with customers	E	VG	G	S	P	N
10. Effective resource allocation	E	VG	G	S	P	N

## B. Please rate the Contractor's Management experience/performance in the following areas:

1. Compliance with the contract	E	VG	G	S	P	N
2. Change Management	E	VG	G	S	P	N
3. Technical Reporting	E	VG	G	S	P	N
4. Cost Control	E	VG	G	S	P	N
5. Financial Reporting	E	VG	G	S	P	N
6. Subcontract Management	E	VG	G	S	P	N
7. Purchasing	E	VG	G	S	P	N
8. Accounting Systems	E	VG	G	S	P	N
9. ISO Compliance	E	VG	G	S	P	N
10. Controlling Work Processes	E	VG	G	S	P	N
11. Document Control	E	VG	G	S	P	N

## C. Please rate the Contractor's specific experience/performance in the following areas:

1. Computer Aided Design (CAD); configuration definition	E	VG	G	S	P	N
2. Computer Aided Engineering (CAE); discipline integration	E	VG	G	S	P	N
3. Computer Aided Manufacturing (CAM); rapid prototyping	E	VG	G	S	P	N
4. Multi-discipline analysis (discipline linkage and interaction)	E	VG	G	S	P	N
5. Subsonic/supersonic aerodynamic analysis	E	VG	G	S	P	N
6. Hypersonic aerodynamic analysis	E	VG	G	S	P	N
7. Stability and control analysis	E	VG	G	S	P	N
8. Hypersonic propulsion (scramjet) design and analysis	E	VG	G	S	P	N
9. Aeroheating and thermal analysis	E	VG	G	S	P	N
10. Structural and dynamic analysis	E	VG	G	S	P	N
11. Mission/trajectory simulation (3- DOF and 6-DOF)	E	VG	G	S	P	N
12. Airframe and propulsion systems integration	E	VG	G	S	P	N
13. Flight management computers (avionics); flight controls	E	VG	G	S	P	N
14. Software for autonomous operation of a flight vehicle	E	VG	G	S	P	N
15. Prototype hardware developed via concurrent engineering	E	VG	G	S	P	N

1-50-OCB.1148

16. Rapid-prototyping method of fabrication and integration	E	VG	G	S	P	N
17. Aerospace materials and manufacturing for Mach 7 flight	E	VG	G	S	P	N
18. Assembly and integration of complete air vehicles	E	VG	G	S	P	N
19. Verification/test of assembled/integrated vehicles	E	VG	G	S	P	N
20. Ground based vehicle systems simulator	E	VG	G	S	P	N
21. Support of validation testing and problem resolution	E	VG	G	S	P	N

V. COMMENTS

PLEASE COMMENT ON CONTRACTOR PERFORMANCE IN THE FOLLOWING AREAS:

1. Would you recommend this contractor for another contract? ☐ YES ☐ NO, Why?

---

---

---

---

---

---

---

---

2. Comment on staffing stability in critical skill areas and supervisory positions.

---

---

---

---

---

---

---

---

3. Overall cost management (include an assessment of the realism of Contractor's cost proposals)

---

---

---

---

---

---

---

---

4. Award Fee/Incentive Fee Performance (If Applicable)

---

---

---

---

5. Additional Comments

---

---

---

---

Attachment 2

**Safety and Health Plan Instructions**

The Offeror shall submit a safety and health plan addressing how the company intends to protect the life, health, and well being of its employees and visitors, as well as protect property and equipment. This plan, as approved by the Center Safety Officer, will be included in any resulting contract. As a minimum, the plan shall address the following areas:

Contract Identification – Provide contract number, period of performance and a brief summary of the scope of work.

Points of Contact and Responsibility – Provide organizational flowchart, including area responsible for safety. The safety organization shall include identification of the Contract Manager and the Safety Representative, and describe responsibilities of each employee in the safety organization.

Safety Regulations – Provide a statement of compliance to applicable OSHA, Federal, State and Local regulations.

Subcontractor Compliance – Address how the prime contractor ensures subcontractor compliance to the approved Safety and Health Plan.

**Attachment 4: Questions and Answers**

1. Q: In the Test Phase of the program for flight over water, will there be a need to recover the vehicle for post flight analysis, and should there be hardware provisions for deceleration, floatation, and beacon?

A: There is no requirement for recovery.

2. Q: Please clarify the difference between a propulsion flowpath surface and the internal engine flowpath.

A: The internal engine flowpath is a subset of the propulsion flowpath as defined in SOW Appendix 2 Section 2.6

3. Q: Why is there a separate ECU and FMU? Can't a single processing unit handle both functions?

A: A separate ECU and FMU allows independent development and testing of the Engine Subsystem.

4. Q: Are there estimates of cowl flap actuation rate needs?

A: No specific cowl flap actuation rate requirement was identified during conceptual design and requirements formulation. The cowl flap actuation rate is a derived requirement and is expected to flow from the DV preliminary design effort.

5. Q: Are there residual X-43A avionics (e.g., FMU) assets available either for test/development or actual flight?

A: The proposer should assume there are no residual X-43A avionics assets.

6. Q: Is the longitudinal stability data for maximum fuel CG or minimum fuel CG?

A: The longitudinal stability data presented at the Industry Briefing was based on a CG location of 46% of the fuselage length regardless of fuel mass state.

7. Q: What is the effect of fuel depletion on maximum stable angle of attack?

A: This is a design solution.

8. Q: Why does the 2-D cross section have a blunt trailing edge?

A: The blunt trailing edge facilitates connection to the Adapter inclusive of connectors and feed-throughs at this interface.

9. Q: What is the maximum combustion pressure? Maximum or nominal fuel injection pressure? Maximum engine thrust? Is the fuel supply to engine discretized or analog?

A: These will be design solutions based on the Contractor-determined trajectory. Maximum combustion pressure, maximum and nominal fuel injection pressure, and maximum engine thrust are all a function of the DV Engine Test Phase trajectory. The Engine Test Phase trajectory will be developed during preliminary design and be finalized at the Critical Design Review.

10. Q: In the body of the Draft Solicitation, Paragraph 3, indicates that the DV emulator core components are to be delivered to NASA Dryden, but the emulator itself is to be delivered to NASA Langley. Is the emulator to be assembled at NASA Dryden by the contractor and then delivered to NASA Langley by the contractor? Also there appears to be a typo in deliverables to NASA Dryden as item number 16 is not covered. Can it be presumed that item 16 is a DFRC deliverable unless advised to the contrary?

**1-50-OCB.1148**

A: The numbering of deliverables has been amended to show the list of deliverables and their destination.

11. Q: It is not clear which of the following documents are to be submitted with the proposal and which are due after 90 days as part of DRD 5, Product Assurance Plan: Quality System Manual, Quality System Procedures, Quality Plan. Similar terminology is used for the Safety and Health Plan in Section L.11.B.4. However in Section L.11.A.4 the Quality Documents are excluded from the page limitation while the Safety and Health Plan is not. It also is not clear whether subcontractor documents must be submitted to the government. Could you please clarify the submission requirements of these documents and if the Safety and Health Plan is to be submitted with the Proposal, is it excluded from the page count? (ref: Draft Solicitation)

A: To demonstrate "ISO compliance," a Quality System Manual, Quality System Procedures, Quality Plan would be required with your proposal. A Safety and Health Plan is also required with your proposal. While the "ISO compliance" documentation is excluded from the page limitation, the Safety and Health Plan is to be included within the limitation. No specific subcontractor documents have been requested in support of the above areas. This clarification has resulted in no changes to the RFP instructions.

12. Q: This section refers to two sets of working groups, one government-led, the other contractor-led, with potentially some members appearing in both. It seems certain that the two groups will be working the same "critical interface areas". What is the desired relationship of the government-led working group to the Contractor's working group, and how do its responsibilities and authority differ from those of the Contractor's working group (which has government members)? (ref; Draft SOW, section 6.1)

A: New wording has been added to Section 6.1 for clarification.

13. Q: Section 6.2.3 of the Draft SOW states that "The Contractor shall provide the systems engineering and integration services ...required for the acquisition, fabrication, integration, verification testing, and operation of three DVs, three DV adapters, and one...Flight Clearance Engine." Section 6.2.4 further states that the Contractor shall provide engineering and technical services...for the support of DV and adapter testing, DV and adapter integration...." Design and analysis activities are not included in these paragraphs. Is this intentional, and if so, can the Government deliverables providing this information be identified?

A: Section 6.2.3 has been modified for clarity.

14. Q: Where can the General Reference Documents listed in the Draft SOW, paragraph 8.3, be obtained?

A: Section 8.3 has been amended to indicate that these documents will be made available after contract award.

15. Q: Section 9.1 of the Draft SOW states that "informal reviews shall be held as deemed necessary by the Project Manager." Can an expected frequency of these meetings be defined to aid in cost estimation?

A: The frequency is a function of unforeseen events, and it is expected that offers propose on the basis of past relevant experiences.

16. Q: In reference to the Draft SOW, Section 9.3.2, is an FCE System Requirements Review (SRR) required prior to the stated FCE Preliminary Design Review (PDR)?

A: The FCE requirements will be presented as a part of the Project delta-SRR.

17. Q: Verification by test of DV and Adapter mass properties to these accuracies will require techniques and GSE that are not currently standard practice. There may be a significant cost impact to increase



**1-50-OCB.1148**

verification accuracy beyond those of standard practices. Reference: App. 1, section 2.1.15, & App. 2, section 4.3)

Should the verification accuracy requirement be a derived requirement based on meeting integrated system performance with 3 sigma uncertainties – including mass properties uncertainties - resulting from standard industry practices?

A: The referenced sections have been reworded for clarification.

18. Q: Appendix 1, Section 2.2.2.7, and Appendix 3, Section 4.7, require fluid systems service life of no less than 500 cycles. This is considerably higher than the requirement (100 cycles) or experience for the X-43A. This may preclude use of X-43A components. Is the increased service life requirement judged cost-effective?

A: The sections have been revised to show mission duty cycles.

19. Q: It is not clear that the government has requested the contractor to design, fabricate and support installation of a surrogate DV, integrated with the pedestal and FCE for the LaRC 8' HTT test activities. Will the government please clarify the need, source and requirements for same? (ref: Appendix 2, Section 4)

A: Referenced section has been reworded for clarification.

20. Q: The requirements for the Adapter OML are very similar to the DV for every criteria other than the surface waviness. The surface finish requirement for the TPS is 128 micro-inches on the DV and Adapter. Can the surface waviness and exterior surface roughness requirements be relaxed, similar to the booster requirements, to allow for alternate and more cost effective solutions for TPS. (ref: Appendix 3, Section 5)

A: Waviness and surface roughness tolerances have been deleted in the referenced section.

21. Q: Appendix 6, Section 4.2 requires a Failure Modes, Effects, and Criticality Analysis (FMECA) to be delivered.
- a. A FMECA entails considerably more detail than a FMEA (such as was required by the X-43A program). Is a FMECA the desired document?
  - b. There is no DRD for the FMECA. Will a description of the required document be provided?

A: (a)The requirement was changed from FMECA to FEMA (Section 4.2). The Fault Tree Analysis was changed from qualitative to quantitative (Section 4.1).

(b)The FMEA is delivered at each design review. It is also required as a part of DRD 6.

22. Q: How should the phrase “80% probability of mission success across all three flights” be interpreted? Three interpretations are possible: 1) 80% probability of success of each mission, 2) 80% probability of achieving three successful missions, or 3) 80% probability of achieving mission success (i.e., acceleration from Mach 5 to Mach 7 under scramjet propulsion) in three missions. Can this be clarified? (ref: Appendix 6, Section 4.3)

A: The answer is 3.

23. Q: Appendix 6, Section 9, requires that a Risk Management Plan be submitted by the contractor. A DRD for this plan is not called out separately, but it is noted as a bullet under DRD #5 the Product Assurance Plan. Is the desire for the Risk Plan submittal to be as part of the Product Assurance Plan or as a separate submission?

A: The Risk Management Plan is now called for DRD#10 as a separate submission.